

# Imibare

Igitabo cy'Umunyeshuri

Umwaka wa

3

w'Amashuri Abanza

**Icapwa rya 2019**

**Uburenganzira bw'umuhanzi**

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# Imibare kuva kuri 0 kugera ku 2 000



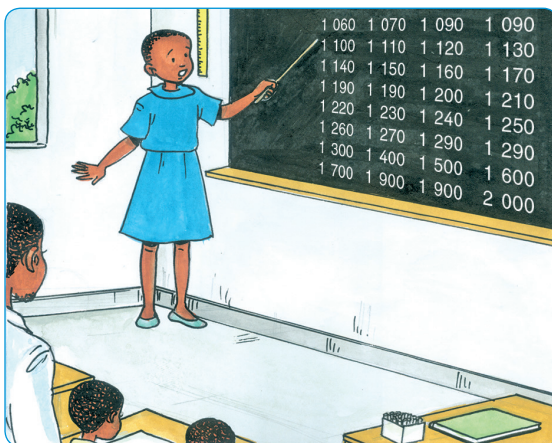
Mugarura yahinze amashu menshi ariko iyo yeze ntajya amenya ayo yasaruye n'asigaye mu murima. Ubwo akeneye kumenya iki mu mibare kugira ngo ashobore gucunga neza umusaruro we?



## 1.1 Gusoma imibare kuva kuri 0 kugera ku 2 000

### Igikorwa cya 1

Mwitegereze ishusho maze mwigane ibiri gukorwa.



### Igikorwa cya 2

Mufate amakarita yanditseho iyi mibare:

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|---|---|---|---|---|---|---|---|---|---|

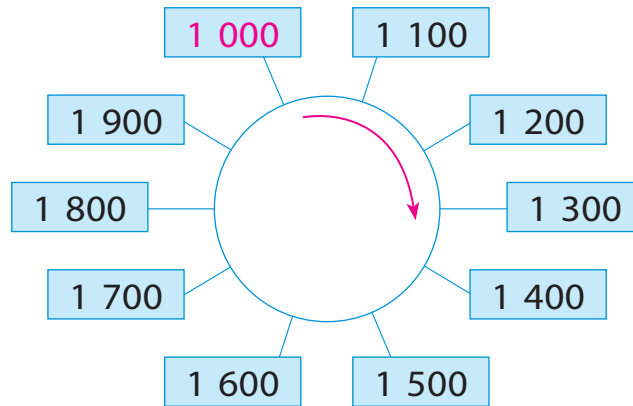
Mukore imibare itandukanye iri hagati ya:

- |                   |                   |
|-------------------|-------------------|
| 1) 1 000 na 1 030 | 3) 1 060 na 1 070 |
| 2) 1 040 na 1 050 | 4) 1 080 na 1 090 |

Buri mubarwa ukora inshuro imwe.

### Igikorwa cya 3

Musome imibare muhereye ku muto mujya ku munini



#### Reka nisuzume

Koresha amakarita y'imibare wahawe ukore imibare 3 iri hagati ya 1 000 na 2 000. Nurangiza uyisomere bagenzi bawe.

|   |   |   |   |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 6 | 5 | 1 | 7 |
| 8 | 1 | 9 | 0 |



#### Nsuzuma ngusuzume

Mu gakarito karimo udupapuro twanditseho imibare 1234; 1908; 1567; 1324; 1110. Buri wese atombore agapapuro kamwe asome aranguruye ijwi umubare wanditseho.

## 1.2 Kwandika imibare kuva kuri 0 kugera ku 2 000

### Igikorwa

Mukoreshe aya makarita y'imibare.

|   |   |   |   |
|---|---|---|---|
| 9 | 4 | 7 | 1 |
| 6 | 1 | 8 | 7 |
| 8 | 9 | 1 | 2 |
| 9 | 1 | 5 | 7 |

Mukore imibare 4 iri hagati ya 1 000 na 2 000

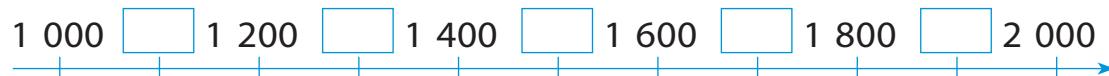
Muyandike mu magambo hanyuma muyisomere bagenzi banyu. Buri mubarwa ukoreshwe inshuro imwe mu mubare.

## Umwitozo

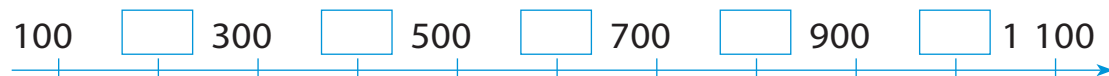


Shaka imibare ibura kuri uyu murongo w'ibara, uyisome unayandike mu magambo.

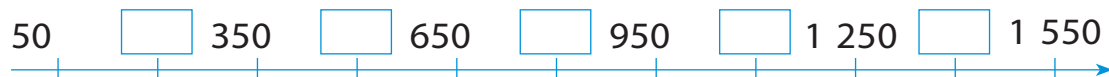
a)



b)



c)



## Reka nisuzume



Shaka imibare iri hagati ya:

a) 1 990 na 2 000

c) 1 590 na 1 600

b) 1 240 na 1 250

d) 1 920 na 1 930

Uyandike mu mibare no mu magambo



## Nsuzuma ngusuzume



Mukoresheje amakarita y'imibare:



Nimukore imibare 4 iri hagati ya 1 000 na 2 000. Nimurangiza muyandike mu magambo hanyuma muyisomere bagenzi banyu.

Itegeko: Buri mubarwa ukora inshuro imwe mu mubare

## Imyitozo



1) Andika mu mibare cyangwa mu magambo

a) 1 924

b) Igihumbi magana atatu na cumi n'ikenda:

c) Igihumbi magana inani mirongo irindwi na kane:

d) 1 499

2) Koresha amakarita y'imibare akurikira

|   |   |   |   |
|---|---|---|---|
| 9 | 8 | 1 | 5 |
|---|---|---|---|

ukore imibare 6 iri hagati ya 1 000 na 2 000 uyisome, uyandike mu ikayi yawe y'imyitozo, mu mibare no mu magambo.

3) Soma imibare iri mu mbonerahamwe ikurikira:

- lyanditse mu magambo uyandike mu mibare
- lyanditse mu mibare uyandike mu magambo

|   |                                       |   |                                                        |
|---|---------------------------------------|---|--------------------------------------------------------|
| a | 1 674: ____                           | d | Ibihumbi bibiri: ____                                  |
| b | Igihumbi magana kenda na gatanu: ____ | e | 1 719: ____                                            |
| c | 1 395: ____                           | f | Igihumbi magana atatu na mirongo ine na karindwi: ____ |

### 1.3 Gusesengura imibare kuva kuri 0 kugera ku 2 000

#### Igikorwa cya 1

Itegereze imbonerahamwe ikurikira, usobanure ibyakozwe.

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
| 1                    | 4                 | 5                 | 6                  |

Umubare 1 456 ugizwe n'ikinyagihumbi \_\_ ibinyajana \_\_, ibinyacumi \_\_ n'ibinyabumwe \_\_

#### Igikorwa cya 2

Mwandike imibare ikurikira mu mbonerahamwe mukurikiza urugero rw'ibyakozwe mu gikorwa cya 1. Mugaragaze ibinyagihumbi, ibinyacumi, n'ibinyabumwe.

- |          |          |          |
|----------|----------|----------|
| a) 1 456 | c) 1 699 | e) 1 953 |
| b) 1 239 | d) 1 479 | f) 1 974 |



## Reka nisuzume



Itegereze ibinyagihumbi (h), ibinyajana(j), ibinyacumi (c) n'ibinyabumwe(b) maze wandike umubare wasesenguwe.

- |                    |                    |                    |
|--------------------|--------------------|--------------------|
| a) h 1 c 9 b 5 j 7 | c) j 6 b 9 c 4 h 1 | e) b 7 c 5 h 1 j 9 |
| b) b 9 j 9 h 1 c 9 | d) c 9 j 3 h 1 b 5 | f) c 9 h 1 b 5 j 2 |

## Imyitozo



Koresha imbonerahamwe y'ibara ushyire umubare mu mwanya wawo.

- |                            |                            |
|----------------------------|----------------------------|
| a) 1 456 = h _ j _ c _ b _ | d) 1 239 = b _ j _ c _ h _ |
| b) 1 996 = c _ h _ b _ j _ | e) 1 197 = c _ j _ h _ b _ |
| c) 1 759 = j _ b _ h _ c _ | f) 1 597 = j _ b _ h _ c _ |

### Nsobanukiwe ko:

- Agaciro k'ibinyagihumbi (h) ari umubare wabyo gukuba na 1 000
- Agaciro k'ibinyajana (j) ari umubare wabyo gukuba na 100
- Agaciro k'ibinyacumi (c) ari umubare wabyo gukuba na 10
- Agaciro k'ibinyabumwe (b) ari umubare wabyo gukuba na 1

### Igikorwa cya 3

- a) Itegereze usobanure ibyakozwe
- $$1\ 675 = 1\ 000 + 600 + 70 + 5$$
- $$1\ 675 = (1 \times 1\ 000) + (6 \times 100) + (7 \times 10) + (1 \times 5)$$
- $$1\ 675 = \text{Ikinyagihumbi } \_, \text{ Ibinyajana } \_, \text{ Ibinyacumi } \_, \text{ Ibinyabumwe } \_$$
- b) Kora nk'ibyakozwe hejuru muri a)
- $$1\ 874$$

## Igikorwa cya 4

Musesengure imibare ikurikira mo ibinyagihumbi (h), ibinyajana (j), ibinyacumi (c) n'ibinyabumwe (b) musobanure uburyo byakozwemo.

- |            |            |            |
|------------|------------|------------|
| a) 1 265 = | c) 1 645 = | e) 1 997 = |
| b) 1 799 = | d) 1 436 = | f) 1 956 = |



## Nsuzuma ngusuzume

Mutahure kandi mwandike imibare yasesenguwe

- a)  $(1 \times 1\,000) + (9 \times 100) + (4 \times 10) + (5 \times 1) =$   
b)  $1\,000 + 900 + 50 + 9$  bingana \_\_\_\_\_  
c) Ibinyagihumbi 1 + Ibinyajana 9 + Ibinyacumi 7 + Ibinyabumwe 3 bingana \_\_\_\_\_

## Imyitozo



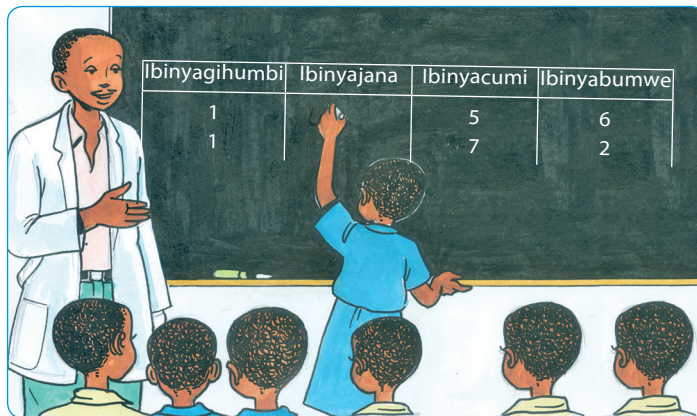
- 1) Koresha imbonerahamwe y'ibara, uvuge umwanya n'agaciro k'imibarwa icyeho akarongo.
- |                   |                   |                   |
|-------------------|-------------------|-------------------|
| a) 1 45 <u>6</u>  | c) 1 3 <u>2</u> 4 | e) 1 179          |
| b) 1 7 <u>9</u> 5 | d) 1 2 <u>9</u> 9 | f) 1 9 <u>7</u> 5 |
- 2) Shaka umubare wasesenguwemo ibinyagihumbi (h), ibinyajana (j), ibinyacumi (c) n'ibinyabumwe (b).
- |                      |                      |
|----------------------|----------------------|
| a) b 6 h 1 c 9 j 9 = | c) c 9 h 1 b 9 j 7 = |
| b) b 7 c 9 h 1 j 9 = | d) j 5 b 4 c 8 h 1 = |
- 3) Sesengura imibare ikurikira mo ibinyagihumbi (h), ibinyajana (j), ibinyacumi (c) n'ibinyabumwe (b).
- |            |            |            |
|------------|------------|------------|
| a) 1 765 = | c) 1 956 = | e) 1 564 = |
| b) 1 672 = | d) 1 254 = | f) 1 713 = |
- 4) Shaka umubare wasesenguwe
- a)  $(1 \times 1\,000) + (2 \times 100) + (3 \times 10) + (4 \times 1) =$   
b)  $1\,000 + 300 + 70 + 1 =$   
c)  $h\,1 + j\,7 + c\,9 + b\,6 =$



## 1.4 Kugereranya imibare 2 itarenze 2 000

### Igikorwa cya 1

Itegereze iyi shusho, uvuge ibiri gukorwa.



**Urugero:** 1 872 Uruta 1 356 bikandikwa gutya:  $1\ 862 > 1\ 346$

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
| 1             | 3          | 5          | 6           |
| 1             | 8          | 7          | 2           |

### Igikorwa cya 2

Mukurikize urugero mwahawe mugereranye imibare ikurikira mukoresha  $<$ ,  $>$  na  $=$

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| a) 1 356 <input type="text"/> 1 536 | d) 1 709 <input type="text"/> 1 790 |
| b) 1 905 <input type="text"/> 1 805 | e) 1 206 <input type="text"/> 1 267 |
| c) 1 037 <input type="text"/> 1 037 | f) 1 670 <input type="text"/> 1 670 |

### Igikorwa cya 3

Mukurikize urugero mwahawe mugereranye imibare ikurikira mukoresha  $<$ ,  $>$  na  $=$

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| a) 1 329 <input type="text"/> 1 408 | d) 1 709 <input type="text"/> 1 709 |
| b) 1 736 <input type="text"/> 1 763 | e) 1 206 <input type="text"/> 1 216 |
| c) 1 429 <input type="text"/> 1 249 | f) 1 670 <input type="text"/> 1 671 |

### Nsobanukiwe ko:

Iyo ugereranya imibare ibiri wita kuri ibi bikurikira:

1. Uhera ku binyagihumbi ujya ku binyabumwe ukagenda ugereranya buri mubarwa
2. Iyo ibinyagihumbi bingana uhita ugereranya ibinyajana
3. Iyo ibinyajana bingana uhita ugereranya ibinyacumi
4. Iyo ibinyacumi bingana ugereranya ibinyabumwe
5. Ibyo byose iyo birangiye wamenye umubare munini n'umuto cyangwa wabonye ko imibare ingana ukoresha ibimenyetso by'igereranya ari byo:  
< (Birutwa), > (Biruta) na = (Bihwanye)

Ikitonderwa:

Ibimenyetso by'igereranya bya < na > bigomba kuba bireba buri gihe ahari umubare munini.

### Igikorwa cya 4

Mukoreshe amakarita ariho imibare mugereranye imibare mushyiramo ikimenyetso k'igereranya gikwiye.

Urugero:

1 674

>

1 235

- a) 1 311        1 515    c) 1 140        1 834
- b) 1 180        1 798    d) 1 084        1 084



Reka nisuzume

Gereranya abantu babarurirwa mu kagari kacu bari muri iyi mbonerahamwe.

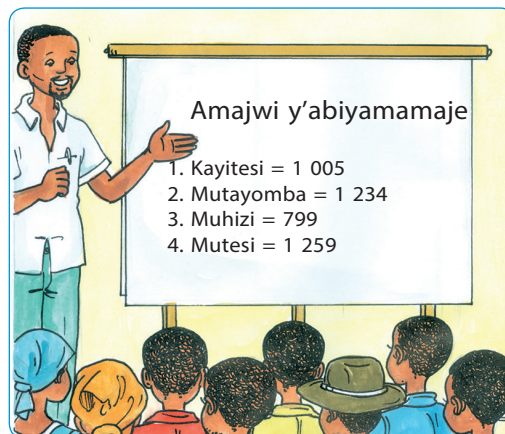
| Abagabo | Abagore | Urubyiruko | Abana |
|---------|---------|------------|-------|
| 1 395   | 1 421   | 1 432      | 1 999 |

- a) Umubare w'abagore n'uw'abagabo
- b) Umubare w'abana n'uw'abagabo
- c) Umubare w'abagore n'uw'abana
- d) Umubare w'abagabo n'uw'urubyiruko

- e) Umubare w'abagore n'uw'urubyiruko  
f) Umubare w'abana n'uw'urubyiruko

### Igikorwa cya 5

Mwitegereze iyi shusho maze mugereranye amajwi y'abana batorewe guhagararira abandi mu Kagari.



- a) Muhizi afite amajwi \_\_\_\_\_  
b) Mutesi afite amajwi \_\_\_\_\_  
c) Kayitesi afite amajwi \_\_\_\_\_  
d) Mutayomba afite amajwi \_\_\_\_\_  
e) Muri aba bakandida ni nde ufite amajwi make?  
f) Muri aba bakandida ni nde ufite amajwi menshi?  
g) Gereranya amajwi y'abakandida ukoresheje  $<$ ,  $>$  na  $=$   
– Kayitesi na Mutayomba  
– Kayitesi na Muhizi  
– Kayitesi na Mutesi  
– Mutayomba na Muhizi  
– Mutayomba na Mutesi  
– Muhizi na Mutesi

### Imyitozo



Mukoreshe  $<$ ,  $>$  na  $=$  mugereranye imibare ikurikira:

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| a) 1 905 <input type="text"/> 1 905 | d) 1 532 <input type="text"/> 1 325 |
| b) 1 714 <input type="text"/> 1 797 | e) 1 647 <input type="text"/> 1 647 |
| c) 1 926 <input type="text"/> 1 673 | f) 1 351 <input type="text"/> 1 513 |

## 1.5 Gutondeka imibare kuva kuri 0 kugera ku 2 000

### A. Gutondeka imibare kuva ku muto ujya ku munini

#### Igikorwa

Kurikiza urugero utondeke imibare yo kuri (a) na (b) uva ku muto ujya ku munini.

**Urugero:** Tondeka imibare uhagaze ku muto ujya ku munini,  
1 649, 1 836, 1 598, 1 752

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
| 1             | 6          | 4          | 9           |
| 1             | 8          | 3          | 6           |
| 1             | 5          | 9          | 8           |
| 1             | 7          | 5          | 2           |

Igisubizo: 1 598, 1 649, 1 752, 1 836

a) 1 953, 1 395, 1 593

b) 1 613, 1 136, 1 479



#### Reka nisuzume

Ifashishe impapuro, wandike imibare 10, iri hagati ya 1 000 na 2 000 uyitondeke uva ku muto ujya ku munini.



#### Nsuzuma ngusuzume

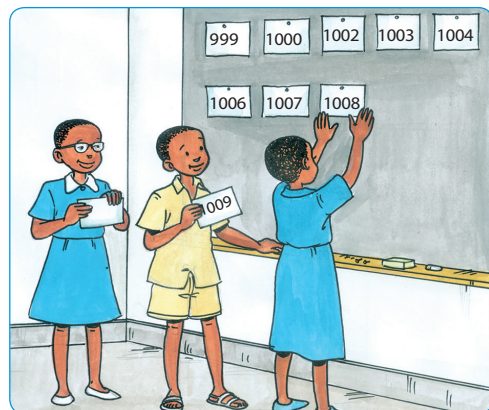
Mukoreshe amakarita mwigane ibiri gukorwa ku ishusho mutondeke imibare iriho muhereye ku muto mujya ku munini

A) 

|       |       |       |
|-------|-------|-------|
| 1 596 | 1 569 | 1 965 |
| 1 956 | 1 659 | 1 695 |

B) 

|       |       |       |
|-------|-------|-------|
| 1 475 | 1 745 | 1 457 |
| 1 754 | 1 574 | 1 547 |



## B. Gutondeka imibare uva ku mubare munini ujya ku mubare muto

### Igikorwa

Mukurikize urugero mwahawe maze mutondeke imibare yo muri (a) n'iyi muri (b) muva ku munini mujya ku muto.

**Urugero:** Tondeka iyi mibare uva ku munini ujya ku muto

1 987, 1 897, 1 789

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
| 1             | 9          | 8          | 7           |
| 1             | 8          | 9          | 7           |
| 1             | 7          | 8          | 9           |

Igisubizo: 1 987, 1 897, 1 789

a) 1 048, 1 840, 1 084

b) 1 613, 1 136, 1 479



### Reka nisuzume

Tondeka imibare iri ku makarita uva ku munini ujya ku muto

1 769

1 976

1 679

1 796

1 967

1 697

1 919



### Nsuzuma ngusuzume

Mwifashishe impapuro, mwandike imibare 10, iri hagati ya 1 000 na 2 000 muyitondeke muva ku munini mujya ku muto.

### Nsobanukiwe ko:

Iyo utondeka imibare ukoresha imbonerahamwe y'ibara:

- Ukabanza kugereranya ibinyagihumbi ureba uko birutana
- Ibinyajana na byo ukareba uko birutana
- Ibinyacumi na byo ukareba uko birutana
- Ibinyabumwe na byo ukareba uko birutana
- Ugatondeka ukurikije uko wabisabwe.

## 1.6 Guteranya imibare igiteranyo cyayo kitarenze 2 000

### A. Iteranya ritabitsa ry'imibare ibiri igiteranyo cyayo kitarenze 2 000

#### Igikorwa

Musubize ibibazo bikurikira mukurikije urugero mwahawe

Urugero:  $1\ 324 + 675 =$

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
| 1<br>↓        | 3<br>6     | 2<br>7     | 4<br>5      |
| 1             | 9          | 9          | 9           |

$$1\ 324 + 675 = 1\ 999$$

a)  $1\ 156 + 823 =$

d)  $972 + 1\ 017 =$

b)  $1\ 543 + 456 =$

e)  $675 + 1\ 323 =$

c)  $1\ 235 + 704 =$

f)  $794 + 1\ 002 =$



#### Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $+$  na  $=$

A)  $1\ 124$   $1\ 005$   $1\ 234$   $1\ 252$   $1\ 542$   $1\ 321$   $1\ 213$

B)  $471$   $982$   $625$   $717$   $437$   $678$   $785$

C)  $1\ 998$   $1\ 859$   $1\ 999$   $1\ 595$   $1\ 979$   $1\ 987$   $1\ 969$

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cyo  $+$
- Mukurikizeho ikarita yo muri B iteganye n'iyo wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C

### Nsobanukiwe ko:

Iyo uteranya imibare ibiri ukora ibi bikurikira:

1. Wifashisha imbonerahamwe y'ibara
2. Umubare munini ukajya hejuru, umuto ukajya hasi.
3. Uteranya uherezeye ku binyabumwe ugaherukira ku binyagihumbi.
4. Ukandukura igiteranyo



### Reka nisuzume

Muteranye imibare ikurikira:

- |                     |                     |
|---------------------|---------------------|
| a) $1\ 234 + 763 =$ | d) $1\ 099 + 900 =$ |
| b) $567 + 134 =$    | e) $765 + 1\ 213 =$ |
| c) $990 + 1\ 009 =$ | f) $1\ 002 + 691 =$ |

### Imyitozo

- |                                                             |                                                             |                                                             |                                                             |                                                             |
|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| a) $\begin{array}{r} 1\ 256 \\ + 421 \\ \hline \end{array}$ | b) $\begin{array}{r} 1\ 523 \\ + 376 \\ \hline \end{array}$ | c) $\begin{array}{r} 1\ 435 \\ + 543 \\ \hline \end{array}$ | d) $\begin{array}{r} 1\ 124 \\ + 872 \\ \hline \end{array}$ | e) $\begin{array}{r} 1\ 340 \\ + 549 \\ \hline \end{array}$ |
|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|

B. Iteranya ribitsa ry'imibare igiteranyo cyayo kitarenze 2 000

### Igikorwa

Musubize ibibazo bikurikira mukurikije urugero mwahawe:

Urugero:  $1\ 425 + 575 = 2\ 000$

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
| 1             | 1          | 1          | 5           |
| 1             | 4          | 2          | 5           |
| +             | 5          | 7          |             |
| 2             | 0          | 0          | 0           |

- |                  |                     |
|------------------|---------------------|
| a) $934 + 799 =$ | c) $999 + 1\ 001 =$ |
| b) $967 + 999 =$ | d) $1\ 099 + 897 =$ |



## Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $+$  na  $=$

|    |       |       |       |       |       |       |       |
|----|-------|-------|-------|-------|-------|-------|-------|
| A) | 924   | 905   | 834   | 952   | 642   | 721   | 813   |
| B) | 897   | 997   | 789   | 879   | 858   | 999   | 979   |
| C) | 1 623 | 1 831 | 1 902 | 1 821 | 1 500 | 1 720 | 1 792 |

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cyo  $+$
- Mukurikizeho ikarita yo muri B iteganye n'iyo wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C

### Nsobanukiwe ko:

Iyo uteranya imibare ibiri:

1. Wifashisha imbonerahamwe y'ibara
2. Uteranya uhereye ku binyabumwe ugana ku binyagihumbi.
3. Umubare munini ujya hejuru, umuto ukajya hasi.
4. Iyo igiteranyo k'ibinyabumwe kigizwe n'imibarwa ibiri, wandika ikinyabumwe k'icyo giteranyo, ukabitsa ikinyacumi hejuru y'ibinyacumi, ukabiteranya, ukagomeza utyo kugera ku binyagihumbi.
5. Ukandukura igiteranyo.



## Reka nisuzume

Teranya imibare ikurikira:

- |                  |                  |
|------------------|------------------|
| a) 1 056 + 899 = | d) 972 + 969 =   |
| b) 797 + 1 197 = | e) 675 + 979 =   |
| c) 1 235 + 757 = | f) 1 239 + 476 = |



## Imyitozo



- a)  $\begin{array}{r} 1\ 197 \\ + 654 \\ \hline \end{array}$     b)  $\begin{array}{r} 1\ 093 \\ + 379 \\ \hline \end{array}$     c)  $\begin{array}{r} 1\ 395 \\ + 499 \\ \hline \end{array}$     d)  $\begin{array}{r} 1\ 541 \\ + 379 \\ \hline \end{array}$     e)  $\begin{array}{r} 1\ 154 \\ + 779 \\ \hline \end{array}$

## 1.7 Amahurizo yo guteranya imibare igiteranyo cyayo kitarenze 2 000

### Urugero:

Umwaka ushize Muhizi yasaruye inanasi 799, uyu mwaka asarura 967. Shaka igiteranyo k'inanasi yasaruye mu myaka ibiri.

| Ibyo mfite mu ihurizo                       | Ibyo mbazwa                                           | Inzira n'igisubizo                                                   |
|---------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------|
| Inanasi Muhizi yasaruye umwaka ushize = 799 | Igiteranyo k'inanasi zose zasaruwe mu myaka ibiri = ? | Inanasi zasaruwe mu myaka ibiri:<br>$799 + 967 = 1\ 766$             |
| Inanasi Muhizi yasaruye uyu mwaka = 799     |                                                       | $\begin{array}{r} 1\ 1 \\ 967 \\ + 799 \\ \hline 1\ 766 \end{array}$ |



### Nsuzuma ngusuzume

- 1) Mu Muji wa Kigali hubatse amagorofa 754 n'andi mazu y'ikitegerereze 969. Shaka umubare w'amazu yose yubatswe mu Muji wa Kigali?
- 2) Mu isoko hacururizamo abagore 1 006 n'abagabo 979. Shaka umubare w'abacuruzi bose hamwe.
- 3) Ishuri ryigamo abakobwa 997 n'abahungu 967. Shaka umubare w'abanyeshuri biga muri iryo shuri.
- 4) Mu bitaro byivurizamo abarwayi batandukanye, mu kwezi kumwe haje abagore 799, abana 356 n'abagabo 795. Shaka umubare w'abivuriye muri ibyo bitaro bose hamwe.



## Reka nisuzume

- 1) Mu nzu y'imyidagaduro hari abagore 976 n'abagabo 779. Muri iyo nzu harimo abantu bangahe?
- 2) Akagari kacu gatuwemo n'abagore 357, abana 656, abagabo 337 n'urubyiruko 731. Akagari kacu gatuwe n'abaturage bangahe?
- 3) Muri banki habikuza abantu batandukanye. Mu cyumweru kimwe habikuje abagore 969, abagabo 656 n'urubyiruko 245. Shaka umubare w'ababikuje muri icyo cyumweru.
- 4) Mu murenge wa Kicukiro harimo amazu y'ikitegerereze 675, amagorofa 199 n'amazu aciriritse 992. Muri uwo murenge harimo amazu angahe?

## 1.8 Gukuramo imibare itarenze 2 000

### A. Ikuramo ridatira ry'imibare itarenze 2 000

#### Igikorwa cya 1

Itegereze urugero usobanure ibyakozwe

**Urugero:**  $1\,999 - 1\,675 = 324$

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
| 1             | 9          | 9          | 9           |
| - 1           | 6          | 7          | 5           |
| 0             | 3          | 2          | 4           |

#### Igikorwa cya 2

Musubize ibibazo bikurikira mukurikije urugero mwahawe

- |                        |                        |                        |                        |
|------------------------|------------------------|------------------------|------------------------|
| a) $1\,956 - 1\,421 =$ | c) $1\,975$            | d) $1\,694$            | e) $1\,799$            |
| b) $1\,599 - 1\,376 =$ | $- \underline{1\,543}$ | $- \underline{1\,372}$ | $- \underline{1\,249}$ |



## Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $-$  na  $=$

|    |       |       |       |       |       |       |       |
|----|-------|-------|-------|-------|-------|-------|-------|
| A) | 1 698 | 1 875 | 1 579 | 1 958 | 1 385 | 1 296 | 1 473 |
| B) | 1 416 | 1 352 | 1 156 | 1 327 | 1 274 | 276   | 1061  |
| C) | 412   | 631   | 282   | 111   | 1020  | 523   | 423   |

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $-$
- Mukurikizeho ikarita yo muri B iteganye n'iyi wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C

### Nsobanukiwe ko:

Iyo ukuramo imibare ukora ibi bikurikira:

1. Wifashisha imbonerahamwe y'ibara
2. Wandika imibare mu mbonerahamwe y'ibara uhagaze ku munini.
3. Uhera ku binyabumwe ukuramo ugaheruka ibinyagihumbi.
4. Wandukura ikinyuranyo ubonye.



## Reka nisuzume

Kuramo imibare ikurikira:

- |                    |                    |
|--------------------|--------------------|
| a) 1 995 - 763 =   | d) 1 999 - 979 =   |
| b) 1 567 - 1 341 = | e) 1 765 - 1 213 = |
| c) 1 990 - 1 090 = | f) 1 956 - 923 =   |

### Imyitozo

- |          |          |          |          |          |
|----------|----------|----------|----------|----------|
| a) 1 543 | b) 1 835 | c) 1 972 | d) 1 675 | e) 1 979 |
| - 421    | - 704    | - 1 070  | - 1 323  | - 863    |

## B. Ikuramo ritira ry'imibare itarenze 2 000

### Igikorwa

Musubize ibibazo bikurikira mukurikije urugero mwahawe

Urugero:  $1\ 282 - 967 = 315$

| Ibinyagihumbi               | Ibinyajana   | Ibinyacumi             | Ibinyabumwe  |
|-----------------------------|--------------|------------------------|--------------|
| 0<br><del>1</del><br>↓<br>— | 12<br>2<br>9 | 7<br><del>8</del><br>6 | 12<br>2<br>7 |
| 0                           | 3            | 1                      | 5            |

- a)  $1\ 243 - 979$     b)  $1\ 613 - 1\ 379$     c)  $1\ 345 - 769$     d)  $1\ 524 - 699$     e)  $1\ 241 - 979$



Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $-$  na  $=$

- A)  $1\ 124$   $1\ 005$   $1\ 234$   $1\ 326$   $1\ 421$   $2\ 000$   $1\ 300$   
 B)  $1\ 099$   $987$   $978$   $879$   $786$   $1\ 979$   $1\ 299$   
 C)  $1$   $25$   $256$   $447$   $21$   $18$   $635$

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cyo  $-$
- Mukurikizeho ikarita yo muri B iteganye n'iyo wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C

### Nsobanukiwe ko:

Iyo ukuramo imibare isaba gutira ukora ibi bikurikira:

1. Wifashisha imbonerahamwe y'ibara.
2. Wandika umubare munini hejuru y'umubare muto mu mbonerahamwe y'ibara.
3. Ukuramo uhereye ku binyabumwe ugana ku binyagihumbi.
4. Iyo gukuramo ibinyabumwe bidashoboka, utira ikinyacumi kimwe ukongera ku binyabumwe umubare 10 ugakuramo.
5. Ukomeza utyo aho bidashoboka hose, kugeza ukuyemo ibinyagihumbi.



### Reka nisuzume



Kuramo imibare ikurikira

- |                        |                        |
|------------------------|------------------------|
| a) $1\ 034 - 799 =$    | d) $1\ 345 - 997 =$    |
| b) $1\ 123 - 979 =$    | e) $1\ 456 - 1\ 299 =$ |
| c) $1\ 234 - 1\ 196 =$ | f) $1\ 789 - 1\ 236 =$ |

### Imyitozo



- |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|
| a) $1\ 567$ | b) $1\ 679$ | c) $1\ 799$ | d) $1\ 009$ | e) $1\ 234$ |
| $- 1\ 399$  | $- 1\ 199$  | $- 999$     | $- 969$     | $- 979$     |

## 1.9 Amahurizo yo gukuramo imibare itarenze 2 000

### Urugero:

Mu kigo cyacu higa abanyeshuri 1 791. Niba abahungu ari 999, shaka umubare w'abakobwa biga mu kigo cyacu

| Ibyo mfite                       | Ibyo mbazwa        | Inzira n'igisubizo                                                                                                                               |
|----------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Umubare w'abanyeshuri bose 1 791 | Umubare w'abakobwa | Umubare w'abakobwa:<br>$1791 - 999 = 792$<br>$\begin{array}{r} 16\ 18 \\ 068\ 11 \\ \cancel{1791} \\ -\ 799 \\ \hline \cancel{0992} \end{array}$ |
| Umubare w'abahungu 999           |                    |                                                                                                                                                  |

### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ririmo gukuramo imibare:

1. Ugaragaza ibyo baguhaye mu ihurizo.
2. Ugaragaza ibyo bagusaba mu ihurizo.
3. Wandika umubare munini wahawe mu ihurizo ukawuvanamo umubare muto, ukandika ikinyuranyo.



### Nsuzuma ngusuzume

- 1) Kaneza yateye ibiti 1 917. Hashize iminsi hava izuba ryinshi 769 muri byo biruma. Yasigaranye ibiti bingahe?
- 2) Mutoni yari afite inka 1 231, inka 523 muri zo yazigabiye abavandimwe n'inshuti. Yasigaranye inka zingahe?
- 3) Umurenge wacu utuwe n'abaturage 1 163. Niba abaturage 999 muri bo ari abagore n'abana, shaka umubare w'abagabo n'urubyiruko batuye mu murenge wacu.
- 4) Uruganda rukora imifuka rwakoze imifuka 1 721, imifuka 179 muri yo igurwa na Rukundo. Shaka umubare w'imifuka uruganda rwasigaranye.



### Reka nisuzume

- 1) Ishuri ryacu ryahize kuzatera ibiti 2 000 uyu mwaka kugeza ubu tumaze gutera 1 099. Harabura ibiti bingahe ngo twese umuhigo?

- 2) Mu bitaro by'Akarere hari harwariye abarwayi 1 532 none hasezerewe abarwayi 799 bamaze gukira neza. Hasigayemo abarwayi bangahe?
- 3) Abanyamuryango ba koperative babumbye amatafari 1 911, amatafari 975 muri yo bayubakisha ikiraro k'inkoko. Shaka umubare w'amatafari yasigaye.
- 4) Mu kigo cyacu harimo abantu 1 921, muri bo 124 ni abakozi b'ikigo. Shaka umubare w'abanyeshuri biga muri iryo shuri.

### Imyitozo



- 1) Itegereze neza ibiri mu mbonerahamwe maze ukore ibyo wabajijwe

|   | 1     | 2     |
|---|-------|-------|
| A | 1 234 | 1 623 |
| B | 396   | 245   |
| C | 695   | 309   |
| D | 319   | 299   |

Shaka igiteranyo k'imibare ikurikira:

- a)  $A_1 + B_1 =$       c)  $A_1 + D_1 =$       e)  $A_2 + C_2 =$   
 b)  $A_1 + C_1 =$       d)  $A_2 + B_2 =$       f)  $A_2 + D_2 =$

Shaka ikinyuranyo k'imibare ikurikira:

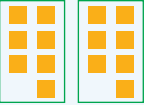
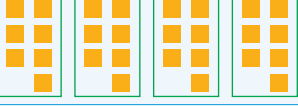
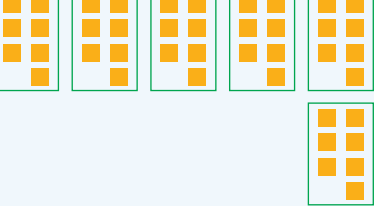
- a)  $A_1 - B_1 =$       c)  $A_1 - D_1 =$       e)  $A_2 - C_2 =$   
 b)  $A_1 - C_1 =$       d)  $A_2 - B_2 =$       f)  $A_2 - D_2 =$

- 2) Mu kagari kacu harimo abantu 996 bemerewe gutora. Mu kagari duturanye, harimo abantu bemerewe gutora 999. Ubwo abantu bemerewe gutora muri utwo tugari twombi ni bangahe?
- 3) Mu ibarura riheruka, Akagari kacu kari gatuwe n'abantu 1 964 bose hamwe. Niba 1 324 muri bo ari abana, ubwo Akagari kacu kari gatuwe n'abantu bakuru bangahe?

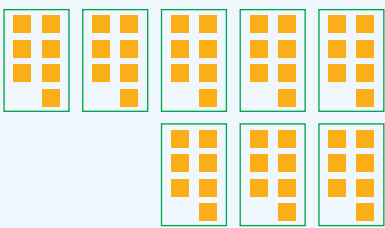
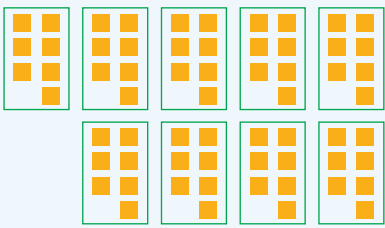
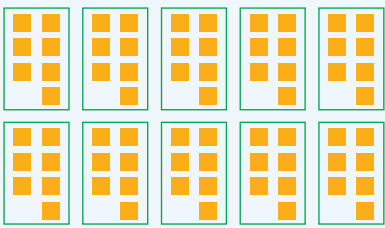
## 1.10 Mara ya 7 n'ibikubo bya 7 bitarenze 70

### Igikorwa

- Mukore uturundo tw'utubarisho 7, 14, 21, 28, 35, 42, 49, 56, 63, 70.
- Mubare ibiri muri buri karundo maze mwandike inshuro uwo mubare ugaruka kuri buri murongo.
- Ese witegereje ibikurikira hari isano iri hagati yo guteranya no gukuba na 7?

|                                  |                                                                                      |              |
|----------------------------------|--------------------------------------------------------------------------------------|--------------|
| 7                                |   | $7 \times 1$ |
| $7 + 7 = 14$                     |    | $7 \times 2$ |
| $7 + 7 + 7 = 21$                 |   | $7 \times 3$ |
| $7 + 7 + 7 + 7 = 28$             |  | $7 \times 4$ |
| $7 + 7 + 7 + 7 + 7 = 35$         |  | $7 \times 5$ |
| $7 + 7 + 7 + 7 + 7 + 7 = 42$     |  | $7 \times 6$ |
| $7 + 7 + 7 + 7 + 7 + 7 + 7 = 49$ |  | $7 \times 7$ |



|                                                   |                                                                                    |               |
|---------------------------------------------------|------------------------------------------------------------------------------------|---------------|
| $7 + 7 + 7 + 7 + 7 + 7$<br>$+ 7 + 7 = 56$         |  | $7 \times 8$  |
| $7 + 7 + 7 + 7 + 7 + 7$<br>$+ 7 + 7 + 7 = 63$     |  | $7 \times 9$  |
| $7 + 7 + 7 + 7 + 7 + 7$<br>$+ 7 + 7 + 7 + 7 = 70$ |  | $7 \times 10$ |

## Imyitozo



### 1) Uzurisha imibare ikwiye

- a)  $7 = 7 \times \square$     e)  $35 = 7 \times \square$     h)  $56 = 7 \times \square$   
 b)  $14 = 7 \times \square$     f)  $42 = 7 \times \square$     i)  $63 = 7 \times \square$   
 c)  $21 = 7 \times \square$     g)  $49 = 7 \times \square$     j)  $70 = 7 \times \square$   
 d)  $28 = 7 \times \square$

### 2) Shaka ibikubo bya 7

- 7 Inshuro 1  $\rightarrow 7 \times 1 = \square$     7 Inshuro 6  $\rightarrow 7 \times 6 = \square$   
 7 Inshuro 2  $\rightarrow 7 \times 2 = \square$     7 Inshuro 7  $\rightarrow 7 \times 7 = \square$   
 7 Inshuro 3  $\rightarrow 7 \times 3 = \square$     7 Inshuro 8  $\rightarrow 7 \times 8 = \square$   
 7 Inshuro 4  $\rightarrow 7 \times 4 = \square$     7 Inshuro 9  $\rightarrow 7 \times 9 = \square$   
 7 Inshuro 5  $\rightarrow 7 \times 5 = \square$     7 Inshuro 10  $\rightarrow 7 \times 10 = \square$

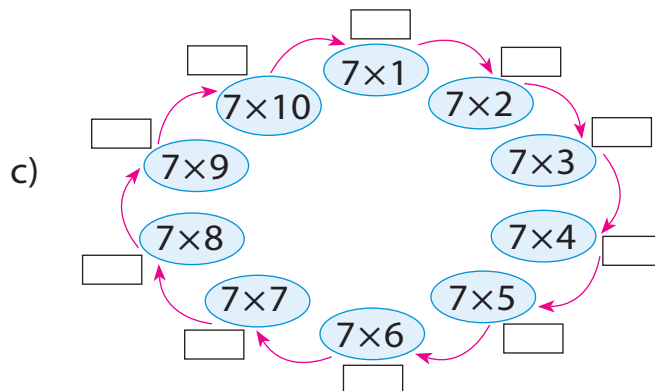
### 3) Uzurisha umubare ukwiye

a)

|            |   |   |   |   |   |   |   |   |   |    |
|------------|---|---|---|---|---|---|---|---|---|----|
|            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 9 | 10 |
| $\times 7$ | — | — | — | — | — | — | — | — | — | —  |

b)

|            |   |   |    |   |    |   |    |   |    |    |
|------------|---|---|----|---|----|---|----|---|----|----|
|            | — | 2 | —  | 4 | —  | 6 | —  | 9 | —  | 10 |
| $\times 7$ | 7 | — | 21 | — | 35 | — | 49 | — | 63 | —  |

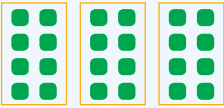
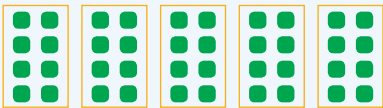
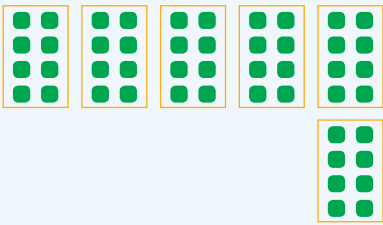
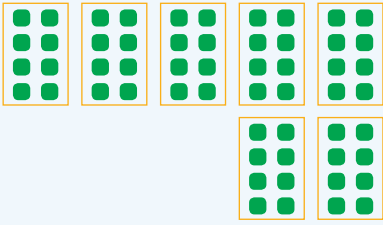
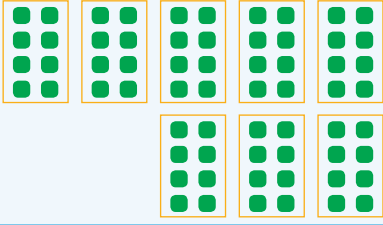
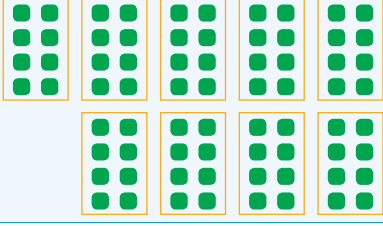
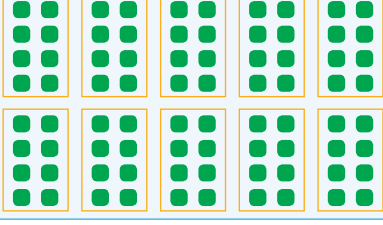


### 1.11 Mara ya 8 n'ibikubo bya 8 bitarenze 80

#### Igikorwa

- Mukore uturundo tw'utubarisho 8, 16, 24, 32, 40, 48, 56, 64, 72, 80.
- Mubare ibiri muri buri karundo maze mwandike inshuro uwo mubare ugaruka kuri buri murongo.
- Ese witegereje ibikurikira hari isano iri hagati yo guteranya no gukuba na 8?

|              |  |              |
|--------------|--|--------------|
| 8            |  | $8 \times 1$ |
| $8 + 8 = 16$ |  | $8 \times 2$ |

|                                              |                                                                                      |               |
|----------------------------------------------|--------------------------------------------------------------------------------------|---------------|
| $8 + 8 + 8 = 24$                             |    | $8 \times 3$  |
| $8 + 8 + 8 + 8 = 32$                         |    | $8 \times 4$  |
| $8 + 8 + 8 + 8 + 8 = 40$                     |    | $8 \times 5$  |
| $8 + 8 + 8 + 8 + 8 + 8 = 48$                 |    | $8 \times 6$  |
| $8 + 8 + 8 + 8 + 8 + 8 + 8 = 56$             |   | $8 \times 7$  |
| $8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 = 64$         |  | $8 \times 8$  |
| $8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 = 72$     |  | $8 \times 9$  |
| $8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 = 80$ |  | $8 \times 10$ |

## Imyitozo



### 1) Uzurisha imibare ikwiye

- a)  $8 = 8 \times \square$     e)  $40 = 8 \times \square$     h)  $64 = 8 \times \square$   
 b)  $16 = 8 \times \square$     f)  $48 = 8 \times \square$     i)  $72 = 8 \times \square$   
 c)  $24 = 8 \times \square$     g)  $56 = 8 \times \square$     j)  $80 = 8 \times \square$   
 d)  $32 = 8 \times \square$

### 2) Shaka ibikubo bya 8

- 8 Inshuro 1  $\rightarrow 8 \times 1 =$       8 Inshuro 6  $\rightarrow 8 \times 6 =$   
 8 Inshuro 2  $\rightarrow 8 \times 2 =$       8 Inshuro 7  $\rightarrow 8 \times 7 =$   
 8 Inshuro 3  $\rightarrow 8 \times 3 =$       8 Inshuro 8  $\rightarrow 8 \times 8 =$   
 8 Inshuro 4  $\rightarrow 8 \times 4 =$       8 Inshuro 9  $\rightarrow 8 \times 9 =$   
 8 Inshuro 5  $\rightarrow 8 \times 5 =$       8 Inshuro 10  $\rightarrow 8 \times 10 =$

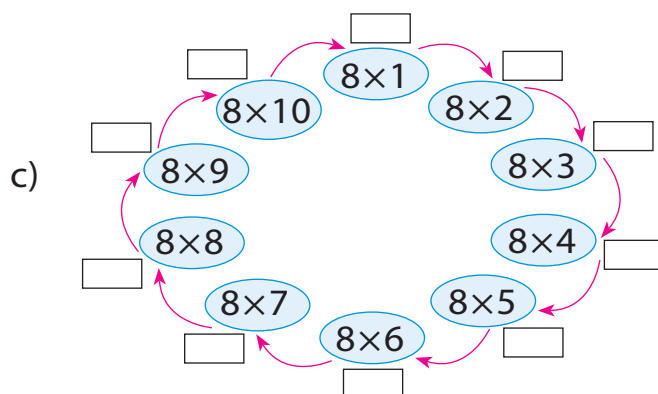
### 3) Uzurisha umubare ukwiye

a)

|               |   |   |   |   |   |   |   |   |   |   |    |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| $\rightarrow$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 9 | 10 |
| $\times 8$    | — | — | — | — | — | — | — | — | — | — | —  |

b)

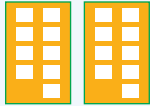
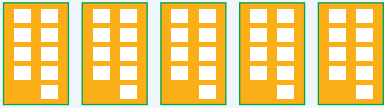
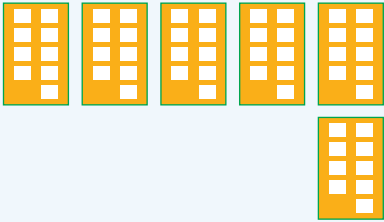
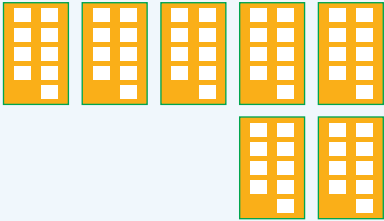
|               |   |   |   |    |   |    |   |    |   |    |    |
|---------------|---|---|---|----|---|----|---|----|---|----|----|
| $\rightarrow$ | 0 | — | 2 | —  | 4 | —  | 6 | —  | 9 | —  | 10 |
| $\times 8$    | — | 8 | — | 24 | — | 40 | — | 56 | — | 72 | —  |

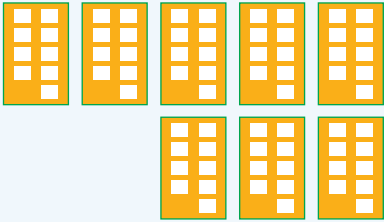
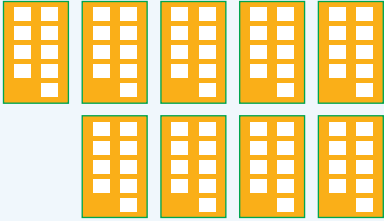
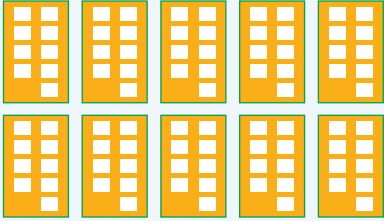


## 1.12 Mara ya 9 n'ibikubo bya 9 bitarenze 90

### Igikorwa

- Mukore uturundo tw'utubarisho 9, 18, 27, 36, 45, 54, 63, 72, 91, 90.
- Mubare ibiri muri buri karundo maze mwandike inshuro uwo mubare ugaruka kuri buri murongo.
- Ese witegereje, ibikurikira hari isano iri hagati yo guteranya no gukuba na 9?

|                                  |                                                                                      |              |
|----------------------------------|--------------------------------------------------------------------------------------|--------------|
| 9                                |   | $9 \times 1$ |
| $9 + 9 = 18$                     |    | $9 \times 2$ |
| $9 + 9 + 9 = 27$                 |   | $9 \times 3$ |
| $9 + 9 + 9 + 9 = 36$             |  | $9 \times 4$ |
| $9 + 9 + 9 + 9 + 9 = 45$         |  | $9 \times 5$ |
| $9 + 9 + 9 + 9 + 9 + 9 = 54$     |  | $9 \times 6$ |
| $9 + 9 + 9 + 9 + 9 + 9 + 9 = 63$ |  | $9 \times 7$ |

|                                                        |                                                                                    |               |
|--------------------------------------------------------|------------------------------------------------------------------------------------|---------------|
| $9 + 9 + 9 + 9 + 9$<br>$+ 9 + 9 + 9 = 72$              |  | $9 \times 8$  |
| $9 + 9 + 9 + 9 + 9 +$<br>$9 + 9 + 9 + 9$<br>$= 81$     |  | $9 \times 9$  |
| $9 + 9 + 9 + 9 + 9 +$<br>$9 + 9 + 9 + 9$<br>$+ 9 = 90$ |  | $9 \times 10$ |

## Imyitozo



### 1) Uzurisha imibare ikwiye

- a)  $9 = 9 \times \square$     e)  $45 = 9 \times \square$     h)  $72 = 9 \times \square$   
 b)  $18 = 9 \times \square$     f)  $54 = 9 \times \square$     i)  $81 = 9 \times \square$   
 c)  $27 = 9 \times \square$     g)  $63 = 9 \times \square$     j)  $90 = 9 \times \square$   
 d)  $36 = 9 \times \square$

### 2) Shaka ibikubo bya 9

- 9 Inshuro 1  $\rightarrow 9 \times 1 =$       9 Inshuro 6  $\rightarrow 9 \times 6 =$   
 9 Inshuro 2  $\rightarrow 9 \times 2 =$       9 Inshuro 7  $\rightarrow 9 \times 7 =$   
 9 Inshuro 3  $\rightarrow 9 \times 3 =$       9 Inshuro 8  $\rightarrow 9 \times 8 =$   
 9 Inshuro 4  $\rightarrow 9 \times 4 =$       9 Inshuro 9  $\rightarrow 9 \times 9 =$   
 9 Inshuro 5  $\rightarrow 9 \times 5 =$       9 Inshuro 10  $\rightarrow 9 \times 10 =$

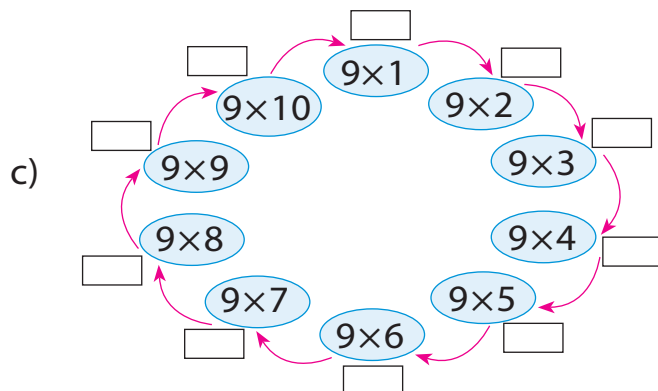
### 3) Uzurisha umubare ukwiye

a)

|                                                                                     |   |   |   |    |   |    |   |    |   |    |    |
|-------------------------------------------------------------------------------------|---|---|---|----|---|----|---|----|---|----|----|
|  | 0 | — | 2 | —  | 4 | —  | 6 | —  | 9 | —  | 10 |
| $\times 9$                                                                          | — | 9 | — | 27 | — | 45 | — | 63 | — | 81 | —  |

b)

|                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | 1                    | <input type="text"/> | 3                    | <input type="text"/> | 5                    | <input type="text"/> | 7                    | <input type="text"/> | 9                    | <input type="text"/> |
| $\times 9$           | 0                    | <input type="text"/> | 18                   | <input type="text"/> | 36                   | <input type="text"/> | 54                   | <input type="text"/> | 72                   | <input type="text"/> | 90                   |



### 1.13 Gukuba imibare y'imibarwa ibiri cyangwa itatu na 7, 8 na 9 igikubo cyayo kitarenze 2 000

#### Igikorwa

Musubize ibibazo bikurikira mukurikije urugero mwahawe

Urugero:  $237 \times 7 = 1\,659$

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
|               | 2          | 4          |             |
|               | 2          | 3          | 7           |
|               |            | $\times$   | 7           |
| 1             | 6          | 5          | 9           |

$7 \times 7 = 49$  Twandika 9 mu binyabumwe tukabitsa 4 mu binyacumi.

$7 \times 3 = 21$  Twandika 1 + 4 mu binyacumi tukabitsa 2 mu binyajana.

$7 \times 2 = 14$  Twandika 4 + 2 mu binyajana tukabitsa 1 mu binyagihumbi.

- a)  $175 \times 7$       b)  $189 \times 8$       c)  $197 \times 9$       d)  $186 \times 7$       e)  $167 \times 8$

$$\begin{array}{r} \text{f) } 169 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{g) } 158 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{h) } 148 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} \text{i) } 179 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{j) } 186 \\ \times 9 \\ \hline \end{array}$$

### Nsobanukiwe ko:

Iyo ukuba imibare uhera ku binyabumwe. Iyo usanze igikubo kigizwe n'imibarwa ibiri wandika ikinyabumwe k'icyo gikubo hanyuma ukabitsa ikinyacumi mu binyacumi. Ukomeza utyo kugeza ku binyagihumbi.



### Nsuzuma ngusuzume

Shaka umubare ubura

$$\begin{array}{r} \text{a) } 245 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b) } 215 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c) } 200 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d) } 239 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e) } 189 \\ \times 8 \\ \hline \end{array}$$



### Reka nisuzume

Igana urugero wahawe ushake ibikubo by'iyi mibare

### Urugero:

$$248 \times 8 = \frac{1600}{(200 \times 8)} + \frac{320}{(40 \times 8)} + \frac{64}{(8 \times 8)} = 1\,984$$

$$\text{a) } 254 \times 7 =$$

$$\text{c) } 219 \times 9 =$$

$$\text{e) } 179 \times 8 =$$

$$\text{b) } 245 \times 8 =$$

$$\text{d) } 198 \times 7 =$$

$$\text{f) } 209 \times 9 =$$

### Imyitozo

$$\begin{array}{r} \text{a) } 274 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b) } 612 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c) } 176 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d) } 199 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e) } 129 \\ \times 6 \\ \hline \end{array}$$



## 1.14 Ikuba ry'umubare w'imibarwa 3 n'undi w'imibarwa 2 igikubo cyayo kitarenze 2 000

### Igikorwa

Musubize ibibazo bikurikira mukurikije urugero mwahawe.

### Urugero:

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
|               | 1          | 2          | 3           |
|               | ×          | 1          | 2           |
| + 1           | 2          | 4          | 6           |
|               | 2          | 3          |             |
| 1             | 4          | 7          | 6           |

- a)  $\begin{array}{r} 111 \\ \times 17 \\ \hline \end{array}$       b)  $\begin{array}{r} 105 \\ \times 19 \\ \hline \end{array}$       c)  $\begin{array}{r} 156 \\ \times 12 \\ \hline \end{array}$       d)  $\begin{array}{r} 179 \\ \times 11 \\ \hline \end{array}$       e)  $\begin{array}{r} 129 \\ \times 15 \\ \hline \end{array}$



Reka nisuzume

- a)  $\begin{array}{r} 146 \\ \times 13 \\ \hline \end{array}$       b)  $\begin{array}{r} 162 \\ \times 12 \\ \hline \end{array}$       c)  $\begin{array}{r} 139 \\ \times 14 \\ \hline \end{array}$       d)  $\begin{array}{r} 152 \\ \times 13 \\ \hline \end{array}$       e)  $\begin{array}{r} 124 \\ \times 15 \\ \hline \end{array}$



Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $\times$  na  $=$

- A)  $\begin{array}{|c|c|c|c|c|c|c|} \hline 114 & 115 & 109 & 103 & 102 & 117 & 112 \\ \hline \end{array}$   
 B)  $\begin{array}{|c|c|c|c|c|c|c|} \hline 14 & 13 & 12 & 11 & 15 & 16 & 17 \\ \hline \end{array}$   
 C)  $\begin{array}{|c|c|c|c|c|c|c|} \hline 1\ 904 & 1\ 530 & 1\ 495 & 1\ 596 & 1\ 872 & 1\ 133 & 1\ 308 \\ \hline \end{array}$

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cyo  $\times$
- Mukurikizeho ikarita yo muri B iteganye n'iyo wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C

### Nsobanukiwe ko:

Iyo ukuba umubare w'imibaruwa 3 n'undi w'imibaruwa 2:

1. Wandika imibare mu mbonerahamwe y'ibara
2. Ukubisha ikinyabumwe kugeza urangije imibaruwa yose
3. Ukubisha ikinyacumi k'igikuba ukandika ikinyabumwe k'igikubo munsu y'inyacumi k'igikubo wabonye.
4. Uteranya ibikubo byose uhereye ku binyabumwe ujya ku binyagihumbi.

### Imyitozo



Itegereze neza imbonerahamwe ushake igikubo wabajijwe

|   | 1   | 2   | 3   | 4   |
|---|-----|-----|-----|-----|
| A | 116 | 113 | 111 | 110 |
| B | 19  | 18  | 17  | 16  |
| C | 15  | 14  | 13  | 12  |

a)  $A 1 \times B 4 =$

c)  $A 1 \times B 3 =$

e)  $A 1 \times C 3 =$

b)  $A 1 \times C 1 =$

d)  $A 1 \times C 2 =$

f)  $A 1 \times C 4 =$

### 1.15 Amahurizo yo gukuba umubare w'imibaruwa 3 n'undi w'imibaruwa 2 igikubo kitarenze 2 000

#### Urugero:

Mu cyumba k'inama harimo imirongo 19 y'intebe kandi kuri buri murongo hariho intebe 105. Shaka umubare w'intebe ziri mu cyumba k'inama.

| Ibyo mfite                                                       | Ibyo mbazwa                            | Inzira n'igisubizo                                  |
|------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------|
| Umubare w'imirongo ni 19<br>Intebe ziri kuri buri murongo ni 105 | Umubare w'intebe ziri muri icyo cyumba | Umubare w'intebe:<br>$105 \times 19 =$ Intebe 1 995 |

### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ririmo gukuba imibare:

1. Ugaragaza ibyo baguhaye mu ihurizo
2. Ugaragaza ibyo bakubaza mu ihurizo
3. Wandika imibare wahawe mu ihurizo mu buryo buhagaze maze ukayikuba hanyuma ukandika igikubo.



### Nsuzuma ngusuzume

- 1) Data yatemye ibitoki abipakira imodoka 17 ziruzura. Shaka umubare w'ibitoki yatemye niba buri modoka yaratwaye ibitoki 117.
- 2) Ibitaro by'Akarere kacu bifite ibyumba by'abarwayi 19. Muri buri cyumba harimo abarwayi 105. Shaka umubare w'abarwayi bari muri ibyo bitaro.
- 3) Mu gasanduku k'itora hajyamo amajwi 148. Shaka umubare w'amajwi ajya mu dusanduku tw'itora 13.
- 4) Mubumbyi abumba amatafari 165 buri munsu. Shaka umubare w'amatafari abumba mu munsu 12.



### Reka nisuzume

- 1) Abanyeshuri bateye ibiti ku mirongo. Buri murongo bawuteye ibiti 162 batera imirongo 12. Bateye ibiti bingahe muri rusange?
- 2) Butera yaguriye abana 135 bo mu Kagari amakayi. Buri mwana yamuguriye amakayi 14. Ubwo Butera yaguze amakayi angahe yose hamwe?
- 3) Umucuruzi acuruza isabune 124 buri munsu. Shaka umubare w'isabune acuruza mu munsu 16.
- 4) Mu kigo k'ishuri hari ibyumba by'amashuri 18 kandi muri buri shuri harimo intebe 15. icyo kigo k'ishuri kirimo intebe zingahe?

## 1.16 Ikuba ry'imibare na 100 na 1 000 igikubo cyayo kitarenze 2 000

### Igikorwa

Musubize ibibazo bikurikira mwifashishije urugero mwahawe.

#### Urugero:

a)  $19 \times 100 = 1\,900$

c)  $1 \times 1\,000 = 1\,000$

b)  $13 \times 100 = 1\,300$

d)  $2 \times 1\,000 = 2\,000$

a)  $12 \times 100 =$

c)  $1 \times 1\,000 =$

e)  $19 \times 100 =$

b)  $17 \times 100 =$

d)  $10 \times 100 =$

f)  $2 \times 1\,000 =$

#### Nsobanukiwe ko:

- Iyo ukuba umubare na 100 wandika uwo mubare ukandika amazeru abiri (00) inyuma y'uwo mubare.
- Iyo ukuba umubare na 1 000 wandika uwo mubare ukandika amazeru atatu (000) inyuma y'uwo mubare.

### Imyitozo

Uzurisha 100 cyangwa 1 000

a)  $\square \times 13 = 1\,300$

e)  $\square \times 1 = 1\,000$

b)  $16 \times \square = 1\,600$

f)  $14 \times \square = 1\,400$

c)  $10 \times \square = 1\,000$

g)  $2 \times \square = 2\,000$

d)  $17 \times \square = 1\,700$

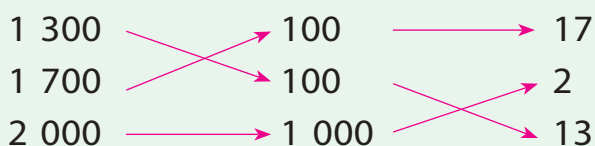
h)  $20 \times \square = 2\,000$



#### Reka nisuzume

Huza umubare n'igisubizo kiri cyo ukurikije urugero

#### Urugero:



- a) 700                      1000                      15  
 b) 800                      1 000                      2  
 c) 2 000                      100                      1  
 d) 1 000                      100                      8  
 e) 1 500                      100                      7

### 1.17 Igabanya ridasagura ry'umubare w'imibarwa 4 n'umubare w'umubarwa 1 imibare itarenze 2 000

#### Igikorwa cya 1

Mwuzuze iyi mbonerahamwe

|                                                                                     |   |    |    |    |    |    |    |    |    |    |
|-------------------------------------------------------------------------------------|---|----|----|----|----|----|----|----|----|----|
|    | 2 | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20 |
| : 2                                                                                 | — | —  | —  | —  | —  | —  | —  | —  | —  | —  |
|    | 3 | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| : 3                                                                                 | — | —  | —  | —  | —  | —  | —  | —  | —  | —  |
|  | 4 | 8  | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| : 4                                                                                 | — | —  | —  | —  | —  | —  | —  | —  | —  | —  |
|  | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| : 5                                                                                 | — | —  | —  | —  | —  | —  | —  | —  | —  | —  |
|  | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| : 6                                                                                 | — | —  | —  | —  | —  | —  | —  | —  | —  | —  |
|  | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| : 7                                                                                 | — | —  | —  | —  | —  | —  | —  | —  | —  | —  |
|  | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| : 8                                                                                 | — | —  | —  | —  | —  | —  | —  | —  | —  | —  |
|  | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| : 9                                                                                 | — | —  | —  | —  | —  | —  | —  | —  | —  | —  |

## Igikorwa cya 2

Musubize ibibazo bikurikira mukurikije urugero mwahawe

### Urugero:

$$1\ 866 : 6 = 311$$

$$\begin{array}{r} 1866 \\ - 18 \\ \hline 006 \\ - 6 \\ \hline 06 \\ - 6 \\ \hline 0 \end{array}$$

$$1\ 484 : 7 = 212$$

$$\begin{array}{r} 1484 \\ - 14 \\ \hline 008 \\ - 7 \\ \hline 14 \\ - 14 \\ \hline 0 \end{array}$$

$$1\ 648 : 8 = 206$$

$$\begin{array}{r} 1648 \\ - 16 \\ \hline 004 \\ - 0 \\ \hline 48 \\ - 48 \\ \hline 0 \end{array}$$

a)  $1\ 236 : 4 =$

c)  $1\ 648 : 8 =$

e)  $1\ 768 : 2 =$

b)  $1\ 575 : 5 =$

d)  $1\ 989 : 9 =$

f)  $1\ 326 : 6 =$



### Nsuzuma ngusuzume

- 1) Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $:$  na  $=$ .

A)  $1\ 449$   $1\ 872$   $1\ 704$   $1\ 540$   $1\ 896$   $1\ 648$   $1\ 686$

B)  $7$   $9$   $8$   $5$   $6$   $4$   $3$

C)  $213$   $316$   $208$   $412$   $562$   $207$   $308$

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cyo  $:$
- Mukurikizeho ikarita yo muri B iteganye n'iyi wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C

- 2) Mukore amakarita ariho imibare mwihiyemo iri hagati ya  $1\ 000$  na  $2\ 000$  n'andi ariho ibimenyetso  $-$  na  $:$ . Mukore nk'ibyakozwe hejuru.

### Nsobanukiwe ko:

Iyo ugabanya imibare ukora ibi bikurikira:

1. Wandika imibare mu mahembe
2. Uhera ku binyagihumbi ugabanya, ugakurikizaho ibinyajana, ibinyacumi, ugaherukira ku binyabumwe.
3. Iyo ibinyagihumbi ari bike ugereranyije n'ikigabanya ufatira hamwe ibinyagihumbi n'ibinyajana.
4. Iyo ibyasigaye ku binyagihumbi n'ibinyajana hiyongereyeho n'ibinyacumi ari bike ugereranyije n'ikigabanya ushyiramo 0 ugakuramo hanyuma ukamanura ibinyabumwe.

### Imyitozo



Itegereze neza imbonerahamwe maze ukore ibyo wabajijwe

|   | 1     | 2     | 3     | 4     | 5     | 6     |
|---|-------|-------|-------|-------|-------|-------|
| A | 1 064 | 1 998 | 2 000 | 1 872 | 1 267 | 1 872 |
| B | 9     | 8     | 7     | 6     | 5     | 8     |

Shaka ikigabanyo k'imibare ikurikira

- a) A 1 na B 2                      c) A 3 na B 5                      e) A 5 na B 3  
b) A 2 na B 1                      d) A 4 na B 4                      f) A 4 na B 6

## 1.18 Amahurizo yo kugabanya

### Urugero:

Abanyeshuri 96 bashyizwe mu matsinda 8 ku buryo bungana. Buri tsinda ririmo abanyeshuri bangahe?

| Ibyo mfite                                                  | Ibyo mbazwa                                 | Inzira n'igisubizo                                         |
|-------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------|
| Umubare w'abanyeshuri bose = 96<br>Umubare w'amatsinda ni 8 | Umubare w'abanyeshuri bari muri buri tsinda | Umubare w'abanyeshuri bari muri buri tsinda ni $96:8 = 12$ |



### Nsuzuma ngusuzume

- 1) Abanyeshuri 378 bashyizwe mu mashuri 9 ku buryo bungana. Buri shuri ryagiyemo abanyeshuri bangahe?
- 2) Akarere gafite ibitabo 894 gashaka gusaranganya ku buryo bungana amashuri 6. Buri shuri rizahabwa ibitabo bingahe?
- 3) Umurenge wacu ufite inzitiramibu 1 985 ushaka kugabanya ku buryo bungana utugari 5 tuwugize. Buri kagari kazabona inzitiramibu zingahe?
- 4) Umuhinzi yasaruye imifuka y'ibirayi 1 359 ayipakira amafuso 9 ku buryo bungana. Buri fuso yatwaye imifuka ingahe y'ibirayi?

### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ririmo kugabanya imibare,

1. Ugaragaza ibyo baguhaye mu ihurizo
2. Ugaragaza ibyo bakubaza.
3. Wandika imibare wahawe mu ihurizo mu mahembe maze ukayigabanya hanyuma ukandika ikigabanyo.



### Reka nisuzume

- 1) Keza afite amagi 1 768 ashaka gushyira mu makarito 8 ku buryo bungana. Buri karito izajyamo amagi angahe?
- 2) Abaterankunga bafite imipira yo gukina 1 484 bashaka gusaranganya ku buryo bungana uturere 7. Buri karere kazahabwa imipira ingahe?
- 3) Mubumbyi yabumbye amatafari 1 888 mu minsi 8. Shaka umubare w'amatafari abumba ku munsi umwe niba abumba amatafari angana buri munsi.
- 4) Gabanya ku buryo bungana ibitabo 1 845 ibigo by'amashuri 5. Buri kigo kizahabwa ibitabo bingahe?



### 1.19 Isuzuma risoza umutwe wa 1

- 1) Andika 1 987 mu magambo:
- 2) Shaka umubare wasesenguwe: b 9 c 8 h 1 j 7 =
- 3) Tahura imibare yasesenguwe  
 $(1 \times 1\,000) + (7 \times 100) + (9 \times 10) + (8 \times 1) =$
- 4) Vuga umwanya w'imibarwa icyeho akarongo  
a) 1 856      b) 1 7 87      c) 1 32 4      d) 1 258
- 5) Gereranya ukoresheje  $<$ ,  $>$  na  $=$   
a) 1 095  1 059      b) 1 741  1 876
- 6) Tondeka iyi mibare uhereye ku muto ujya ku munini  
1 789, 1 879, 1 798, 1 897, 1 978, 1 987
- 7) Tondeka iyi mibare uhereye ku munini ujya ku muto  
1 978, 1 987, 1 789, 1 798, 1 879, 1 897
- 8) Shaka igiteranyo k'imibare ikurikira:  
a)  $1\,434 + 563 =$       b)  $895 + 1\,009 =$
- 9) Shaka ikinyuranyo k'imibare ikurikira:  
a)  $1\,785 - 762 =$       b)  $1\,967 - 1\,356 =$
- 10) Shaka igikubo k'imibare ikurikira  
a)  $\begin{array}{r} 156 \\ \times 8 \\ \hline \end{array}$       b)  $\begin{array}{r} 205 \\ \times 7 \\ \hline \end{array}$       c)  $\begin{array}{r} 209 \\ \times 9 \\ \hline \end{array}$       d)  $\begin{array}{r} 124 \\ \times 15 \\ \hline \end{array}$       e)  $\begin{array}{r} 147 \\ \times 13 \\ \hline \end{array}$
- 11) Shaka ikigabanyo k'imibare ikurikira  
a)  $1\,998 : 9 =$       b)  $1\,875 : 5 =$
- 12) Mu Kagari ka Bibare hatuye abagabo 367, abagore 445, urubyiruko 461 n'abana 723. Shaka umubare w'abaturage b'ako kagari.
- 13) Ishuri rifite abanyeshuri 1 874. Shaka umubare w'abahungu niba abakobwa ari 987.
- 14) Ikigo cy'amahugurwa gifite ibyumba by'inama 7 kandi muri buri cyumba harimo abahugurwa 275. Shaka umubare w'abantu bari guhugurirwa muri icyo kigo.
- 15) Gabanya ku buryo bungana inzitiramibu 1 998 imidugudu 6. Buri mudugudu uzahabwa inzitiramibu zingahe?

# Imibare kuva kuri 0 kugera ku 5 000



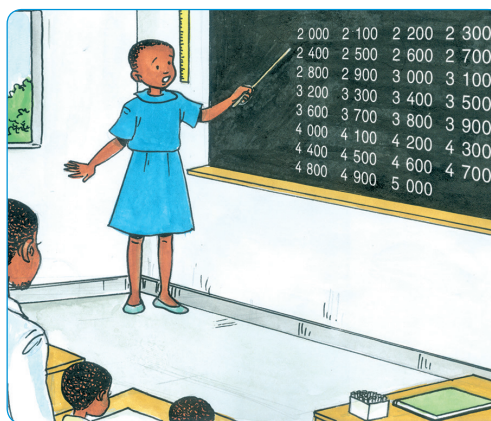
Rugero yoroye inkoko nyinshi zitera amagi. Ashimishwa no kubona amagi yuzuye agatebo. Ntamenya ayo yagurishije n'ayo asigaranye. Ubwo Rugero akeneye kumenya iki mu mibare kugira ngo azatere imbere?



## 2.1 Gusoma imibare kuva kuri 0 kugera ku 5 000

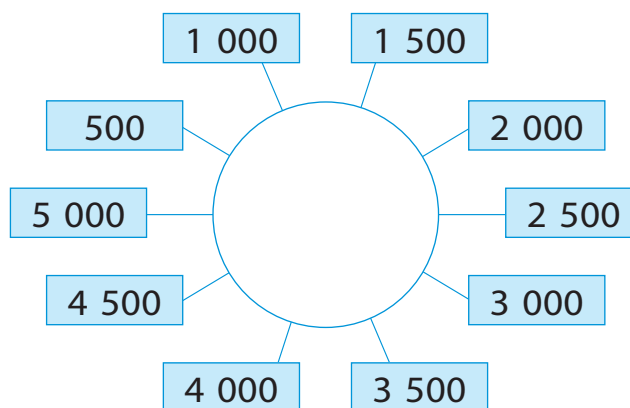
### Igikorwa cya 1

- Mwitegereze maze musome imibare iri ku ishusho.
- Imibare iri ku ishusho igizwe n'imibarwa ingahe?



### Igikorwa cya 2

- Musome imibare iri kuri uru ruziga muhereye ku muto mujya ku munini.
- Ni iyihe mibare igizwe n'imibarwa ine?
- Vuga imibare igizwe n'imibarwa itatu.





## Reka nisuzume



Fata amakarita yanditseho iyi mibare:

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|---|---|---|---|---|---|---|---|---|---|

Ukore imibare 3 wishakiye iri hagati ya

- |                   |                   |                   |
|-------------------|-------------------|-------------------|
| a) 2 000 na 2 500 | c) 3 000 na 3 500 | e) 4 000 na 4 500 |
| b) 2 500 na 3 000 | d) 3 500 na 4 000 | f) 4 500 na 5 000 |

## Imyitozo



Mu gakarito karimo udupapuro twanditseho imibare 1 251; 2 437; 3 317. Tombora agapapuro kamwe usome umubare wanditseho uranguruye ijwi.

## 2.2 Kwandika imibare kuva kuri 0 kugera ku 5 000

### Igikorwa cya 1

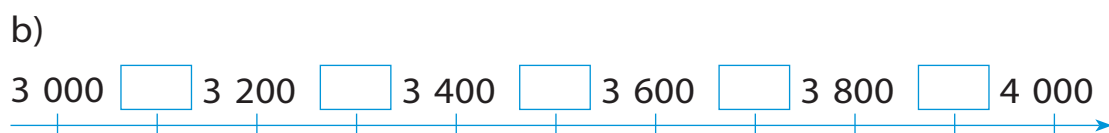
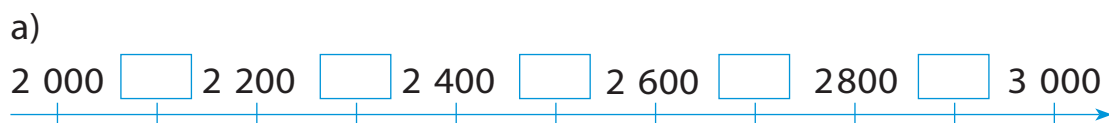
Mukoreshe amakarita y'imibare mwahawe mukore imibare 5 iri hagati ya 2 000 na 5 000. Muyandike mu magambo hanyuma muyisomere bagenzi banyu.

- |    |   |   |   |   |   |
|----|---|---|---|---|---|
| 1) | 1 | 2 | 3 | 4 | 5 |
| 2) | 6 | 7 | 8 | 9 | 0 |

Itegeko: Buri mubarwa ukora inshuro imwe mu mubare

### Igikorwa cya 2

Mushake imibare ibura kuri uyu murongo w'ibara, muyandike muyisome, munayandike mu magambo.



c)



### Igikorwa cya 3

Mukoreshe amakarita y'imibare akurikira mukore imibare 5 iri hagati ya 2 000 na 5 000. Muyandike mu magambo. Muyisomere bagenzi banyu. Buri mubarwa ukora inshuro imwe mu mubare

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|



### Reka nisuzume

Shaka imibare wabajijwe maze uyandike mu mibare no mu magambo: Imibare iri hagati ya:

- a) 2 015 na 2 020      b) 2 070 na 2 075      c) 4 065 na 4 070

### Imyitozo



- 1) Andika imibare ikurikira mu mibare cyangwa mu magambo
  - a) 4 924
  - b) Ibihumbi bitatu na cumi n'umunani
  - c) Ibihumbi bine magana inani na mirongo irindwi
  - d) 2 949
  - e) 4 157
  - f) Ibihumbi bibiri magana arindwi na mirongo itanu na kane
- 2) Koresha amakarita y'imibare akurikira:

|   |   |   |   |
|---|---|---|---|
| 4 | 3 | 2 | 1 |
|---|---|---|---|

ukore imibare 6 iri hagati ya 1 000 na 5 000 uyisome kandi uyandike mu ikayi yawe y'imyitozo, mu mibare no mu magambo.
- 3) Soma imibare iri mu mbonerahamwe ikurikira:
  - a) Iyanditse mu magambo uyandike mu mibare
  - b) Iyanditse mu mibare uyandike mu magambo

|   |                                                         |   |                                                      |   |                                                                          |
|---|---------------------------------------------------------|---|------------------------------------------------------|---|--------------------------------------------------------------------------|
| a | 3 764: ____                                             | d | Ibihumbi bine<br>magana kenda<br>n'umunani: ____     | g | 2 273: ____                                                              |
| b | Ibihumbi<br>bibiri magana<br>arindwi na<br>gatanu: ____ | e | 4 936: ____                                          | h | Ibihumbi bitatu<br>magana atanu<br>na mirongo<br>itatu n'ikenda:<br>____ |
| c | 3 953: ____                                             | f | Ibihumbi bibiri<br>magana atatu<br>na karindwi: ____ | i | 4 719: ____                                                              |

### 2.3 Gusesengura imibare kuva kuri 0 kugera ku 5 000

#### Igikorwa cya 1

Mwandike iyi mibare mu mbonerahamwe mukurikiza urugero mwahawe. Mugaragaze ibinyagihumbi, ibinyajana, ibinyacumi, n'ibinyabumwe.

**Urugero:** Umubare 2 456 ugizwe n'ibinyagihumbi 2, ibinyajana 4, ibinyacumi 5 n'ibinyabumwe 6

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
| 2                    | 4                 | 5                 | 6                  |

- |          |          |          |
|----------|----------|----------|
| a) 3 546 | c) 4 969 | e) 4 935 |
| b) 2 932 | d) 2 794 | f) 3 794 |

#### Igikorwa cya 2

Mukoreshe imbonerahamwe y'ibara, mushyire buri mubare mu mwanya wawo.

- |                        |                        |
|------------------------|------------------------|
| a) 2 564 = h_ j_ c_ b_ | d) 2 936 = b_ j_ c_ h_ |
| b) 3 968 = c_ h_ b_ j_ | e) 3 917 = c_ j_ h_ b_ |
| c) 4 975 = j_ b_ h_ c_ | f) 4 795 = j_ b_ h_ c_ |

### Igikorwa cya 3

Mwitegereze ibinyagihumbi (h), ibinyajana(j), ibinyacumi (c) n'ibinyabumwe(b) maze mwandike umubare wasesenguwe.

a)  $h\ 2\ c\ 7\ b\ 5\ j\ 9 =$

d)  $c\ 5\ j\ 3\ h\ 2\ b\ 9 =$

b)  $b\ 9\ j\ 8\ h\ 4\ c\ 1 =$

e)  $b\ 7\ c\ 9\ h\ 3\ j\ 5 =$

c)  $j\ 6\ b\ 4\ c\ 6\ h\ 2 =$

f)  $c\ 9\ h\ 4\ b\ 4\ j\ 1 =$

#### Nsobanukiwe ko:

- Agaciro k'ibinyagihumbi (h) ari umubare wabyo  $\times 1\ 000$
- Agaciro k'ibinyajana (j) ari umubare wabyo  $\times 100$
- Agaciro k'ibinyacumi (c) ari umubare wabyo  $\times 10$
- Agaciro k'ibinyabumwe (b) ari umubare wabyo  $\times 1$



#### Reka nisuzume

Sesengura iyi mibare mo ibinyagihumbi (h), ibinyajana (j), ibinyacumi (c) n'ibinyabumwe (b).

#### Urugero:

a)  $4\ 765 = 4\ 000 + 700 + 60 + 5$

b)  $3\ 567 = (3 \times 1\ 000) + (5 \times 100) + (6 \times 10) + (7 \times 1)$

c)  $2\ 893 =$  Ibinyagihumbi 2; Ibinyajana 8; Ibinyacumi 9; Ibinyabumwe 3

a)  $4\ 652 =$

d)  $2\ 634 =$

g)  $3\ 916 =$

b)  $2\ 879 =$

e)  $4\ 971 =$

h)  $2\ 397 =$

c)  $3\ 574 =$

f)  $3\ 695 =$

i)  $4\ 645 =$



#### Nsuzuma ngusuzume

Mutahure imibare yasesenguwe

a)  $(2 \times 1\ 000) + (6 \times 100) + (3 \times 10) + (9 \times 1) =$

b)  $4\ 000 + 300 + 70 + 9 =$

c) Ibinyagihumbi 3; Ibinyajana 7; Ibinyacumi 4; Ibinyabumwe 2 =

## Imyitozo



- 1) Koresha imbonerahamwe y'ibara, uvuge umwanya n'agaciro k'imibarwa icyeho akarongo.
 

|                          |                   |                          |
|--------------------------|-------------------|--------------------------|
| a) 3 56 <u>4</u>         | c) 2 3 <u>4</u> 2 | e) 2 9 <u>1</u> 7        |
| b) <u>4</u> 7 <u>5</u> 9 | d) 4 <u>9</u> 25  | f) <u>3</u> 7 <u>5</u> 9 |
- 2) Shaka umubare wasesenguwemo ibinyagihumbi (h), ibinyajana (j), ibinyacumi (c) n'ibinyabumwe (b).
 

|                      |                      |
|----------------------|----------------------|
| a) b 5 h 4 c 7 j 9 = | d) j 5 b 8 c 2 h 3 = |
| b) b 7 c 4 h 3 j 6 = | e) j 8 b 9 h 4 c 7 = |
| c) c 9 h 2 b 6 j 7 = | f) b 7 h 2 c 7 j 6 = |
- 3) Sesengura imibare ikurikira mo ibinyagihumbi (h), ibinyajana (j), ibinyacumi (c) n'ibinyabumwe (b).
 

|            |            |            |
|------------|------------|------------|
| a) 4 657 = | c) 3 965 = | e) 2 645 = |
| b) 2 726 = | d) 4 425 = | f) 3 371 = |
- 4) Shaka umubare wasesenguwe
  - a)  $(2 \times 1\,000) + (6 \times 100) + (9 \times 10) + (4 \times 1) =$
  - b)  $4\,000 + 500 + 40 + 9 =$
  - c) Ibinyagihumbi 3 + Ibinyajana 4 + Ibinyacumi 7 + Ibinyabumwe 5 =

## 2.4 Kugereranya imibare 2 itarenze 5 000

### Igikorwa

Mwitegereze ibiri gukorwa ku ishusho. Mukurikize urugero mwahawe maze mugeranye imibare ikurikira:



## Urugero:

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
| 4             | 1          | 8          | 7           |
| 3             | 9          | 5          | 6           |

3 956 urutwa na 4 187 bikandikwa gutya:  $3\ 956 < 4\ 187$

1)  $3\ 671 \square 4\ 738$

3)  $4\ 678 \square 2\ 104$

2)  $4\ 123 \square 3\ 214$

4)  $2\ 340 \square 3\ 340$

## Nsobanukiwe ko:

Iyo ugereranya imibare ibiri wita kuri ibi bikurikira:

1. Uhera ku binyagihumbi ugana ku binyabumwe ukagenda ugereranya buri mubarwa.
2. Iyo ibinyagihumbi bingana uhita ugereranya ibinyajana
3. Iyo ibinyajana bingana uhita ugereranya ibinyacumi
4. Iyo ibinyacumi bingana ugereranya ibinyabumwe
5. Ibyo byose iyo birangiye wamenye umubare umunini n'umuto cyangwa wabonye ko imibare ingana ukoresha ibimenyetso by'igereranya ari byo:  
< (Birutwa), > (Biruta) na = (Bihwanye)

Ikitonderwa:

Ibimenyetso by'igereranya bya < na > bigomba kuba bireba buri gihe ahari umubare munini.



## Reka nisuzume

Koresha <, > na = ugereranye abantu batuye mu kagari ka Kamukina

| Abagabo | Abagore | Urubyiruko | Abana |
|---------|---------|------------|-------|
| 1 823   | 1 987   | 3 298      | 4 567 |

Gereranya umubare

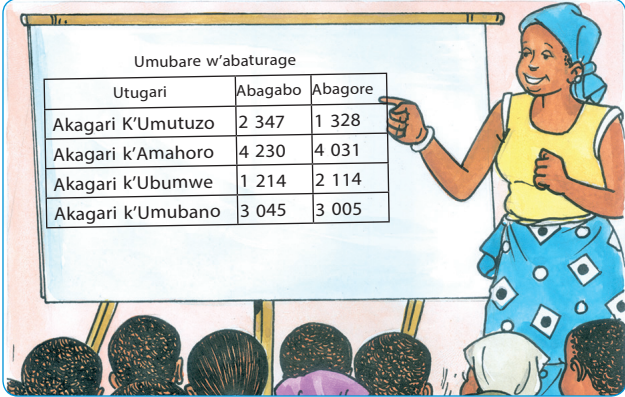
- |                              |                         |
|------------------------------|-------------------------|
| a) w'abagore n'uw'abagabo    | c) w'abana n'uw'abagabo |
| b) w'abagabo n'uw'urubyiruko | d) w'abagabo n'uw'abana |





## Nsuzuma ngusuzume

Mwitegereze ishusho mugereranye imibare y'abaturage batuye muri utu tugari.



| Utugari           | Abagabo | Abagore |
|-------------------|---------|---------|
| Akagari k'Umutuzo | 2 347   | 1 328   |
| Akagari k'Amahoro | 4 230   | 4 031   |
| Akagari k'Ubumwe  | 1 214   | 2 114   |
| Akagari k'Umubano | 3 045   | 3 005   |

Muri utu tugari ni akahe kagari gafite

- 1) Abagabo bake?
- 2) Abagore bake?
- 3) Abagabo benshi?
- 4) Abagore benshi?
- 5) Mukoresheje  $<$ ,  $>$  na  $=$  mugereranye:
  - a) Umubare w'abagabo batuye mu kagari k'Umutuzo n'Akagari k'Amahoro
  - b) Umubare w'abagabo batuye mu kagari k'Ubumwe n'Akagari k'Umubano
  - c) Umubare w'abagabo batuye mu kagari k'Amahoro n'Akagari k'Umubano
  - d) Umubare w'abagabo batuye mu kagari k'Umutuzo n'Akagari k'Ubumwe

## Imyitozo



Mukoreshe  $<$ ,  $>$  na  $=$  mugereranye imibare ikurikira

- a) 4 958  4 958
- b) 3 174  2 797
- c) 2 962  3 637
- d) 4 253  2 352
- e) 3 764  4 674
- f) 2 315  4 135
- g) 2 309  2 309
- h) 3 247  3 274

## 2.5 Gutondeka imibare kuva ku 2 000 kugera ku 5 000

### A. Gutondeka imibare kuva ku muto ujya ku munini

#### Igikorwa cya 1

Tondeka iyi mibare uhereye ku mubare muto ujya ku munini ukurikije urugero wahawe:

**Urugero:** 4 725, 3 257, 4 752

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
| 3                    | 2                 | 5                 | 7                  |
| 4                    | 7                 | 2                 | 5                  |
| 4                    | 7                 | 5                 | 2                  |

- 1) 3 248, 2 348, 4 832
- 2) 3 247, 4 237, 2 743
- 3) 4 334, 3 438, 4 833
- 4) 2 437, 3 472, 4 327

#### Igikorwa cya 2

Mukurikize urugero rugaragara ku ishusho, mutondeke imibare ikurikira muva ku muto mujya ku munini.



- 1) 2 345, 3 245, 4 245, 2 435, 3 425
- 2) 4 425, 2 534, 3 542, 4 524, 2 349
- 3) 4 329, 3 429, 2 934, 4 293, 3 942
- 4) 2 493, 4 939, 3 249, 4 328, 2 483

### Nsobanukiwe ko:

Iyo utondeka imibare, ukoresha imbonerahamwe y'ibara ukagereranya:

- Ibinyagihumbi ureba uko birutanwa.
- Wasanga bingana ukagereranya ibinyajana.
- Na byo wasanga bingana ukagereranya ibinyacumi kugeza ubonye uko imibare irutana.
- Maze ukayikurikiranya uko wategetswe kuyitondeka.



### Reka nisuzume

Tondeka iyi mibare iri ku makarita uva ku mubare muto ujya ku munini. Sobanura uko wabonye igisubizo.

2 456

3 271

1 937

4 010

4 101

### B. Gutondeka imibare uva ku mubare munini ujya ku muto

#### Igikorwa cya 1

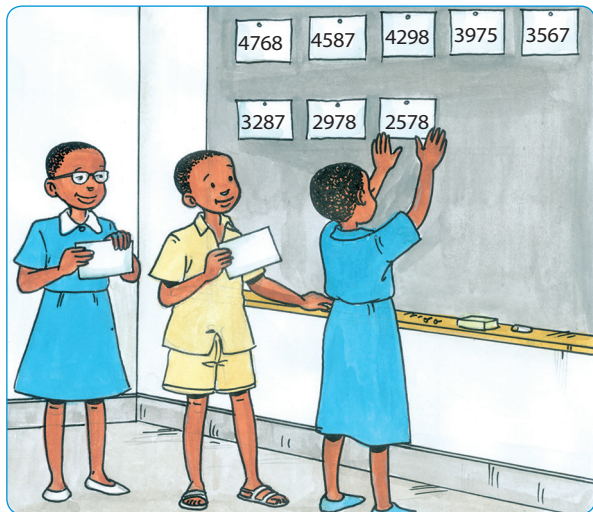
Mukoreshe amakarita mwigane ibiri gukorwa ku ishusho, mutondeke imibare muhereye ku munini mujya ku muto:

a) 

|       |       |       |
|-------|-------|-------|
| 4 321 | 3 214 | 2 431 |
| 4 231 | 3 412 | 2 312 |

b) 

|       |       |       |
|-------|-------|-------|
| 2 341 | 4 123 | 3 124 |
| 2 143 | 3 345 | 4 533 |



## Igikorwa cya 2

Tondeka iyi mibare uhereye ku mubare munini ujya ku muto ukurikije urugero wahawe

**Urugero:** 4 526, 4 735, 4 647

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
| 4             | 7          | 3          | 5           |
| 4             | 6          | 4          | 7           |
| 4             | 5          | 2          | 6           |

- 1) 2 543, 3 254, 4 352
- 2) 4 235, 2 435, 3 453
- 3) 4 932, 2 439, 3 942
- 4) 3 294, 4 293, 3 492



### Nsuzuma ngusuzume

- 1) Tondeka uhereye ku mubare muto ujya ku munini
  - a) 2 938, 2 893, 3 892
  - b) 4 328, 3 428, 2 834
- 2) Tondeka uhereye ku mubare munini ujya ku muto
  - a) 4 369, 3 496, 4 693
  - b) 4 153, 4 315, 3 451

## Imyitozo



- 1) Tondeka uhereye ku mubare muto ujya ku munini
  - a) 4 739, 4 973, 4 397
  - b) 3 479, 4 749, 4 973
  - c) 4 128, 4 182, 4 018, 4 108
  - d) 4 107, 4 701, 4 170, 4 071
- 2) Tondeka uhereye ku mubare munini ujya ku muto
  - a) 2 643, 4 362, 3 263
  - b) 3 647, 4 763, 4 367
  - c) 2 974, 2 479, 2 947
  - d) 3 238, 3 823, 3 283, 3 832

## 2.6 Guteranya imibare igiteranyo cyayo kitarenze 5 000

### A. Iteranya ritabitsa ry'imibare igiteranyo cyayo kitarenze 5 000

#### Igikorwa

Musubize ibibazo bikurikira mukurikije urugero mwahawe

Urugero:  $1\ 213 + 2\ 675 =$

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
| 1             | 2          | 1          | 3           |
| + 2           | 6          | 7          | 5           |
| 3             | 8          | 8          | 8           |

- a)  $3\ 454$    b)  $2\ 523$    c)  $3\ 435$    d)  $4\ 017$    e)  $2\ 454$   
 $+ 1\ 421$     $+ 2\ 175$     $+ 1\ 543$     $+ 972$     $+ 2\ 452$

#### Nsobanukiwe ko:

Iyo uteranya imibare ukora ibi bikurikira:

1. Wifashisha imbonerahamwe y'ibara ukandikamo imibare
2. Ugahera ku binyabumwe uteranya ugaherukira ku binyagihumbi.
3. Wandukura igiteranyo ubonye.



#### Reka nisuzume

Teranya imibare ikurikira:

- a)  $4\ 235 + 763 =$                       d)  $2\ 990 + 2\ 009 =$   
b)  $2\ 567 + 1\ 421 =$                       e)  $3\ 735 + 1\ 251 =$   
c)  $3\ 909 + 1\ 090 =$                       f)  $4\ 056 + 823 =$



## Nsuzuma ngusuzume

Ifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso bya  $+$  na  $=$

A)  $2\ 524$   $3\ 521$   $3\ 274$   $4\ 215$   $2\ 425$   $3\ 156$   $4\ 123$

B)  $2\ 471$   $1\ 268$   $1\ 625$   $581$   $2\ 434$   $1\ 632$   $675$

C)  $4\ 798$   $4\ 788$   $4\ 796$   $4\ 995$   $4\ 859$   $4\ 789$   $4\ 899$

- Ufate ikarita imwe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cyo  $+$
- Ukurikizeho ikarita yo muri B iteganye n'iyi wafashe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Uhitemo igisubizo mu makarita yo muri C

## Imyitozo



a)  $3\ 543$    b)  $2\ 235$    c)  $3\ 972$    d)  $4\ 675$    e)  $2\ 454$   
 $+ 1\ 456$     $+ 2\ 704$     $+ 1\ 017$     $+ 323$     $+ 2\ 452$

B. Iteranya ribitsa ry'imibare igiteranyo cyayo kitarenze 5 000

## Igikorwa

Kurikiza urugero wahawe uteranye imibare ikurikira:

Urugero:  $2\ 725 + 1\ 579 =$

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
| 1             | 1          | 1          |             |
| 2             | 7          | 2          | 5           |
| + 1           | 5          | 7          | 9           |
| 4             | 3          | 0          | 4           |

a)  $2\ 897$    b)  $3\ 093$    c)  $1\ 395$    d)  $1\ 024$    e)  $1\ 154$   
 $+ 1\ 654$     $+ 1\ 379$     $+ 3\ 499$     $+ 3\ 699$     $+ 3\ 779$

### Nsobanukiwe ko:

Iyo uteranya imibare ubitsa ukora ibi bikurikira:

1. Wifashisha imbonerahamwe y'ibara ukandikamo imibare
2. Uhera ku binyabumwe ugana ku binyagihumbi uteranya
3. Iyo igiteranyo k'ibinyabumwe kigizwe n'imibarwa 2 ni ukuvuga uherye ku 10 kuzamura wandika ikinyabumwe k'icyo giteranyo ukabitsa ikinyacumi hejuru y'ibinyacumi by'imibare iteranywa ugakomeza utyo uteranya.
4. Wandukura igiteranyo ubonye.



### Reka nisuzume

Teranya imibare ikurikira:

a)  $2\,943 + 1\,979 =$

c)  $1\,239 + 3\,678 =$

b)  $3\,967 + 797 =$

d)  $2\,795 + 2\,089 =$



### Nsuzuma ngusuzume

Ifashisha amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $+$  na  $=$

A)  $1\,924$   $2\,905$   $3\,024$   $1\,952$   $2\,642$   $3\,721$   $2\,313$

B)  $2\,789$   $1\,978$   $1\,879$   $2\,897$   $2\,198$   $1\,089$   $2\,679$

C)  $4\,903$   $4\,810$   $4\,992$   $4\,713$   $4\,849$   $4\,883$   $4\,840$

- Ufate ikarita imwe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cyo  $+$
- Ukurikizeho ikarita yo muri B iteganye n'iyo wafashe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Uhitamo igisubizo mu makarita yo muri C

## Imyitozo



Teranya iyi mibare

- a)  $\begin{array}{r} 4\ 072 \\ + 928 \\ \hline \end{array}$     b)  $\begin{array}{r} 3\ 235 \\ + 757 \\ \hline \end{array}$     c)  $\begin{array}{r} 3\ 472 \\ + 1\ 097 \\ \hline \end{array}$     d)  $\begin{array}{r} 3\ 765 \\ + 997 \\ \hline \end{array}$     e)  $\begin{array}{r} 3\ 246 \\ + 1\ 475 \\ \hline \end{array}$

## 2.7 Amahurizo yo guteranya imibare igiteranyo cyayo kitarenze 5 000

### Urugero:

Inzu itubura ibitabo itubura ibitabo 2 567 ku manywa na 2 433 n'ijoro. Shaka umubare w'ibitabo bituburwa buri muni.

| Ibyo mfite                           | Ibyo mbazwa                           | Inzira n'igisubizo                                                                                                                                   |
|--------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ibitabo bituburwa ku manywa ni 2 567 | Umubare w'ibitabo bituburwa buri muni | Umubare w'ibitabo bituburwa buri muni:                                                                                                               |
| Ibitabo bituburwa n'ijoro ni 2 433   |                                       | $\begin{array}{r} 2\ 567 + 2\ 433 = \\ 5\ 000 \end{array}$ $\begin{array}{r} 1\ 1\ 1 \\ 2\ 5\ 6\ 7 \\ + 2\ 4\ 3\ 3 \\ \hline 5\ 0\ 0\ 0 \end{array}$ |

### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ryo guteranya imibare:

1. Ugaragaza ibyo baguhaye
2. Ugaragaza ibyo bakubaza
3. Wandika impagarike ibyo wahawe ukabiteranya.



### Nsuzuma ngusuzume

- 1) Uruganda rukora amabati 2 345 mbere ya saa sita na 2 649 nyuma ya saa sita. Shaka umubare w'amabati urwo ruganda rukora buri muni.



- 2) Akagari kacu kateye ibiti 1 897 umwaka ushize naho uyu mwaka kamaze gutera ibiti 3 098. Akagari kacu kamaze gutera ibiti bingahe muri iyi myaka ibiri?
- 3) Urwunge rw'amashuri rwo mu murenge wacu rwigamo abanyeshuri 3 785 mu mashuri abanza n'abandi 1 215 mu mashuri yisumbuye. Shaka umubare w'abanyeshuri biga muri iryo shuri.
- 4) Muri sitade y'umupira w'intoki hari abafana b'abagore 2 178 n'ab'abagabo 2 789. Shaka umubare w'abafana bose bari muri icyo sitade.



### Reka nisuzume



- 1) Mu bitaro harimo abarwayi 2 679, abarwaza 1 829, abaforomo 245 n'abaganga 79. Shaka umubare w'abantu bari muri ibyo bitaro.
- 2) Muri gariyamoshi harimo abagabo 2 189, abagore 1 689 n'abana 789. Shaka umubare w'abantu bari muri icyo gariyamoshi.
- 3) Mu cyumba k'inama harimo abagabo 3 978 n'abagore 978. Muri icyo cyumba harimo abantu bangahe?
- 4) Umwaka ushize Butera yasaruye amashu 3 197 naho uyu mwaka yasaruye 1 789. Mu myaka yombi amaze gusarura amashu angahe?

### Imyitozo



- 1) Ishuri ryacu ryahumbitse ingemwe z'ibiti by'inturusu 1 765 n'iz'ibiti by'imbutu 2 103. Ubwo ryahumbitse ingemwe zingahe zose hamwe?
- 2) Mu masengesho harimo abagabo 1 265, abagore 1 620 n'abana 210. Ubwo hari abantu bangahe bose hamwe?
- 3) Mu ishyamba ry'ishuri ryacu hateye inturusu 1 543 gereveriya 746 n'imisave 1 220. Ubwo ibyo bita byose hamwe ni bingahe?

## 2.8 Gukuramo imibare itarenze 5 000

### A. Ikuramo ridatira ry'imibare itarenze 5 000

#### Igikorwa

Musubize ibibazo bikurikira mukurikije urugero mwahawe

**Urugero:**  $4\ 568 - 3\ 226 =$

|   | Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---|---------------|------------|------------|-------------|
|   | 4             | 5          | 6          | 8           |
| - | 3             | 2          | 2          | 6           |
|   | 1             | 3          | 4          | 2           |

- a)  $4\ 956 - 3\ 124$     b)  $3\ 599 - 3\ 467$     c)  $2\ 975 - 1\ 453$     d)  $3\ 694 - 2\ 573$     e)  $4\ 799 - 3\ 429$

#### Nsobanukiwe ko:

Iyo ukuramo imibare:

1. Wifashisha imbonerahamwe y'ibara
2. Wandika imibare mu mbonerahamwe y'ibara
3. Uhera ku binyabumwe ukuramo ugaheruka ibinyagihumbi.
4. Wandukura ikinyuranyo ubonye.



#### Reka nisuzume

Kuramo imibare ikurikira:

- a)  $4\ 795 - 2\ 563 =$     c)  $2\ 897 - 1\ 794 =$     e)  $2\ 765 - 1\ 312 =$   
b)  $3\ 765 - 2\ 431 =$     d)  $4\ 965 - 3\ 941 =$     f)  $3\ 956 - 2\ 932 =$



#### Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $-$  na  $=$

- A)  $4\ 967$   $3\ 857$   $2\ 957$   $4\ 985$   $3\ 758$   $2\ 896$   $4\ 738$   
B)  $3\ 624$   $2\ 523$   $1\ 915$   $3\ 712$   $2\ 715$   $1\ 465$   $2\ 617$   
C)  $2\ 121$   $1\ 043$   $1\ 343$   $1\ 334$   $1\ 273$   $1\ 431$   $1\ 042$

- Ufate ikarita imwe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cyo  $-$
- Ukurikizeho ikarita yo muri B iteganye n'iyi wafashe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Uhitamo igisubizo mu makarita yo muri C

### Imyitozo



a)  $\begin{array}{r} 2\ 543 \\ -1\ 412 \\ \hline \end{array}$  b)  $\begin{array}{r} 4\ 745 \\ -3\ 230 \\ \hline \end{array}$  c)  $\begin{array}{r} 3\ 729 \\ -2\ 517 \\ \hline \end{array}$  d)  $\begin{array}{r} 2\ 765 \\ -1\ 523 \\ \hline \end{array}$  e)  $\begin{array}{r} 3\ 599 \\ -3\ 429 \\ \hline \end{array}$

### B. Ikuramo ritira ry'imibare itarenze 5 000

#### Igikorwa

Mukore ibibazo bikurikira mukurikije urugero mwahawe

**Urugero:**  $4\ 755 - 2\ 967 =$

| Ibinyagihumbi | Ibinyajana   | Ibinyacumi   | Ibinyabumwe |
|---------------|--------------|--------------|-------------|
| 3             | 16           | 14           | 15          |
| <del>4</del>  | <del>6</del> | <del>4</del> | 5           |
| - 2           | 9            | 6            | 7           |
| 1             | 7            | 8            | 8           |

a)  $\begin{array}{r} 4\ 243 \\ -2\ 798 \\ \hline \end{array}$  b)  $\begin{array}{r} 3\ 613 \\ -2\ 379 \\ \hline \end{array}$  c)  $\begin{array}{r} 2\ 345 \\ -1\ 769 \\ \hline \end{array}$  d)  $\begin{array}{r} 3\ 524 \\ -2\ 659 \\ \hline \end{array}$  e)  $\begin{array}{r} 4\ 241 \\ -1\ 879 \\ \hline \end{array}$

#### Nsobanukiwe ko:

Iyo ukuramo imibare utira ukora ibi bikurikira:

1. Wifashisha imbonerahamwe y'ibara
2. Wandika umubare munini hejuru y'umuto
3. Uhera ku binyabumwe ugana ku binyagihumbi
4. Iyo ukuramo ibinyabumwe bidashoboka, utira ikinyacumi kikongera 10 ku binyabumwe ugakuramo.
5. Ukomeza utyo, kugeza ukuyemo ibinyagihumbi.



## Reka nisuzume



Kuramo imibare ikurikira

a)  $4\,571 - 3\,796 =$

d)  $2\,345 - 1\,687 =$

b)  $3\,423 - 2\,975 =$

e)  $4\,567 - 2\,789 =$

c)  $4\,234 - 3\,596 =$

f)  $3\,567 - 1\,678 =$



## Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $-$  na  $=$

A)  $4\,123$   $3\,105$   $4\,234$   $2\,346$   $4\,241$   $5\,000$   $4\,000$

B)  $2\,079$   $1\,987$   $3\,978$   $1\,879$   $3\,786$   $4\,976$   $3\,298$

C)  $1\,118$   $467$   $702$   $24$   $2\,044$   $455$   $256$

- Ufate ikarita imwe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cyo  $-$
- Ukurikizeho ikarita yo muri B iteganye n'iyiyo wafashe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Uhitemo igisubizo mu makarita yo muri C

## Imyitozo



Shaka ikinyuranyo

a)  $4\,678$    b)  $2\,785$    c)  $4\,009$    d)  $3\,234$    e)  $4\,341$   
 $- 2\,789$     $- 1\,806$     $- 3\,967$     $- 2\,567$     $- 1\,779$

## 2.9 Amahurizo yo gukuramo imibare itarenze 5 000

### Urugero

Mu kagari kacu hatuye abaturage 4 352 muri bo 3 974 bafite mituweri. Ubwo abaturage badafite mituweri ni bangahe?

| Ibyo mfite                | Ibyo mbazwa        | Inzira n'gisubizo       |
|---------------------------|--------------------|-------------------------|
| Abaturage bose ni 4 352   | Abadafite mituweri | Abadafite mituweri ni   |
| Abafite mituweri ni 3 974 |                    | $4\,352 - 3\,974 = 378$ |

### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ririmo gukuramo imibare:

1. Ugaragaza ibyo baguhaye
2. Werekana ibyo bagusabye
3. Wandika umubare munini wahawe mu ihurizo ubuhagaze maze ukawuvanamo umubare muto wahawe mu ihurizo hanyuma ukandika ikinyuranyo.



### Nsuzuma ngusuzume

- 1) Keza yabumbye amatafari 3 567 arayanika. Ayanure hamenekamo amatafari 987, ubwo yasigaranye amatafari angahe?
- 2) Umuyobozi w'ishuri ryacu yaguze ibitabo 4 123, abigejeje ku ishuri ahaho abanyeshuri n'abarezi ibitabo 1 456. Yasigaranye ibitabo bingahe?
- 3) Umurerwa yasaruye avoka 3 214 arazitara, azitaruye asanga 789 muri zo zaraboze. Yasigaranye avoka nzima zingahe?
- 4) Akagari ka Kamukina gafite abaturage 4 132. Muri bo 1 968 bari mu kiciro cya 2 cy'ubudehe. Shaka umubare w'abaturage bari mu bindi byiciro by'ubudehe.



### Reka nisuzume

- 1) Mu kagari dutuyemo harimo inzu 4 356 muri zo 2 789 ni inzu z'ikitegererezo. Shaka umubare w'inzu ziciriritse ziri muri ako kagari?
- 2) Inkoko za Tunga zaturaze amagi 3 456, uwo munsu mu nzu yazo hinjiramo inturo. Zirasahinda zihunga hameneka amagi 987. Hasigaye amagi angahe?
- 3) Umurenge wacu wateye ibiti 4 321 ku munsu w'umuganda. 3 567 muri byo ni byo byameze. Shaka umubare w'ibiti bitameze.

## Imyitozo



Itegereze neza iyi mbonerahamwe maze ukore neza ibyo wabajijwe

|   | 1     | 2     | 3     | 4     |
|---|-------|-------|-------|-------|
| A | 4 254 | 3 672 | 2 675 | 4 734 |
| B | 2 697 | 2 825 | 1 796 | 2 976 |
| C | 659   | 1 098 | 2 978 | 199   |
| D | 591   | 1 279 | 1 597 | 167   |

1) Shaka igiteranyo k'imibare ikurikira

- a)  $A 1 + C 1 =$       c)  $A 2 + C 2 =$       e)  $A 3 + C 4 =$   
 b)  $A 1 + D 1 =$       d)  $A 2 + D 2 =$       f)  $A 3 + D 3 =$

2) Shaka ikinyuranyo k'imibare ikurikira

- a)  $A 1 - B 1 =$       c)  $A 1 - D 1 =$       e)  $A 2 - B 2 =$   
 b)  $A 1 - C 1 =$       d)  $A 1 - D 3 =$       f)  $A 2 - C 2 =$

## 2.10 Ikuba ry'umubare w'imibarwa 3 n'undi w'imibarwa 2 igikubo kitarenze 5 000

### Igikorwa

Musubize ibibazo bikurikira mukurikije urugero mwahawe:

### Urugero:

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
|               | 1<br>×     | 9<br>2     | 8<br>4      |
| + 3           | 7<br>9     | 9<br>6     | 2           |
| 4             | 7          | 5          | 2           |

- a)  $\begin{array}{r} 295 \\ \times 15 \\ \hline \end{array}$       b)  $\begin{array}{r} 198 \\ \times 19 \\ \hline \end{array}$       c)  $\begin{array}{r} 356 \\ \times 12 \\ \hline \end{array}$       d)  $\begin{array}{r} 139 \\ \times 34 \\ \hline \end{array}$   
 e)  $\begin{array}{r} 108 \\ \times 45 \\ \hline \end{array}$       f)  $\begin{array}{r} 209 \\ \times 23 \\ \hline \end{array}$       g)  $\begin{array}{r} 247 \\ \times 19 \\ \hline \end{array}$       h)  $\begin{array}{r} 169 \\ \times 24 \\ \hline \end{array}$

### Nsobanukiwe ko:

Iyo ukuba umubare w'imibaruwa 3 n'undi w'imibaruwa 2:

1. Wandika imibare mu mbonerahamwe y'ibara
2. Ukubisha ikinyabumwe kugeza urangije imibaruwa yose
3. Ukubisha ikinyacumi k'igikuba ukandika ikinyabumwe k'igikubo munsu y'ikinyacumi k'igikubo wabonye.
4. Uteranya ibikubo byose uhereye ku binyabumwe.



### Nsuzuma ngusuzume

Ifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $\times$  na  $=$

|    |       |       |       |       |       |       |       |
|----|-------|-------|-------|-------|-------|-------|-------|
| A) | 237   | 159   | 368   | 193   | 219   | 317   | 412   |
| B) | 21    | 29    | 13    | 25    | 18    | 15    | 12    |
| C) | 4 784 | 3 942 | 4 977 | 4 755 | 4 825 | 4 944 | 4 611 |

- Ufate ikarita imwe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cyo  $\times$
- Ukurikizeho ikarita yo muri B iteganye n'iyi wafashe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Uhitamo igisubizo mu makarita yo muri C

### Imyitozo

Soma imbonerahamwe ikurikira, ushake igikubo wabajijwe.

|   | 1   | 2   | 3   | 4   |
|---|-----|-----|-----|-----|
| A | 156 | 176 | 241 | 354 |
| B | 29  | 18  | 31  | 15  |
| C | 19  | 24  | 13  | 26  |
| D | 109 | 208 | 317 | 367 |

- |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|
| a) $A 1 \times B 1 =$ | c) $A 1 \times B 2 =$ | e) $A 1 \times B 3 =$ |
| b) $A 1 \times C 1 =$ | d) $A 1 \times C 2 =$ | f) $A 1 \times C 3 =$ |

## 2.11 Amahurizo yo gukuba umubare w'imibare 3 n'undi w'imibare 2 igikubo kitarenze 5 000

### Urugero:

Mu rusengero harimo intebe 297. Kuri buri ntebe hicara abantu 16. Urwo rusengero rwakwakira abantu bangahe?

| Ibyo mfite                                  | Ibyo mbazwa                            | Inzira n'igisubizo                                                                                            |
|---------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Umubare w'intebe ni 297                     | Umubare w'abantu bakwirwa mu rusengero | Umubare w'abantu bakwirwa mu rusengero<br>$297 \times 16 =$ Abantu 4 752                                      |
| Umubare w'abantu bicara ku ntebe imwe ni 16 |                                        | $  \begin{array}{r}  297 \\  \times 16 \\  \hline  1782 \\  + 297 \downarrow \\  \hline  4752  \end{array}  $ |

Ndakubisha 6

- $6 \times 7 = 42$  Twandika 2 Tukabika 4
- $6 \times 9 = 54$  Twongeraho 4 tukandika 8 tukabika 5
- $6 \times 2 = 12$  Twongeraho 5 tukandika 17

Ndakubisha 1

- $1 \times 7 = 7$
- $1 \times 9 = 9$
- $1 \times 2 = 2$

### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ririmo gukuba imibare,

1. Werekana ibyo baguhaye mu ihurizo
2. Werekana ibyo bakubaza mu ihurizo
3. Wandika imibare wahawe mu ihurizo mu buryo buhagaze maze ukayikuba hanyuma ukandika igikubo.



Nsuzuma ngusuzume

- 1) Gahire yateye inansi ku mirongo 316. Shaka umubare



w'inanasi yateye niba kuri buri murongo yarahateye inanasi 15.

- 2) Muhongerwa afite udutebo tw'amagi 159. Shaka umubare w'amagi afite niba muri buri gatebo harimo amagi 30.



Reka nisuzume



- 1) Mu cyumba k'inama harimo ibihande 25 birimo intebe 189 muri buri gihande. Shaka umubare w'intebe ziri muri icyo cyumba k'inama.
- 2) Ku munsu w'ingabo, abasirikari bakoze imirongo 245 kuri buri murongo hajyaho abasirikari 19. Shaka umubare w'abasirikari bitabiriye uwo munsu mukuru.

## 2.12 Ikuba ry'imibare na 100 na 1 000 igikubo kitarenze 5 000

### Igikorwa cya 1

Mukube iyi mibare mukurikije urugero mwahawe

#### Urugero:

a)  $29 \times 100 = 2\,900$

b)  $45 \times 100 = 4\,500$

a)  $5 \times 1\,000 =$

b)  $4 \times 1\,000 =$

#### Nsobanukiwe ko:

- Iyo ukuba umubare na 100 wandika uwo mubare ukandika amazeru abiri (00) inyuma y'uwo mubare.
- Iyo ukuba umubare na 1 000 wandika uwo mubare ukandika amazeru atatu (000) inyuma y'uwo mubare.



Reka nisuzume



Murushanwe gushaka byihuse igikubo k'iyi mibare:

a)  $42 \times 100 =$

c)  $2 \times 1\,000 =$

e)  $49 \times 100 =$

b)  $37 \times 100 =$

d)  $36 \times 100 =$

f)  $1 \times 1\,000 =$



## Nsuzuma ngusuzume

- Muhagarare imbere y’utudobo tubiri: Kamwe karimo amakarita yanditseho imibare 10 itandukanye,
- Akandi karimo amakarita yanditseho ibikubo 10 bitandukanye. Buri wese age agenda akoremo ikarita imwe mu kadobo ka mbere
- Mugenzi we ashake igikubo cyawo na 100 cyangwa 1 000 mu kadobo ka kabiri.

## Imyitozo



Uzurisha 10, 100 cyangwa 1 000

a)  $\square \times 3 = 3\,000$

e)  $\square \times 4 = 4\,000$

b)  $46 \times \square = 4\,600$

f)  $35 \times \square = 3\,500$

c)  $5 \times \square = 5\,000$

g)  $3 \times \square = 3\,000$

d)  $28 \times \square = 2\,800$

h)  $2 \times \square = 2\,000$

## 2.13 Igabanya ridasagura ry’umubare w’imibare 4 n’umubare w’umubarwa 1 imibare itarenze 5 000

### Igikorwa

Gabanya imibare ikurikira ukurikije urugero wahawe

### Urugero:

a)  $3\,321 : 9 = 369$

$$\begin{array}{r} 3321 \quad | \quad 9 \\ - 27 \quad \downarrow \\ \hline 5+10 \\ 062 \\ - 54 \quad \downarrow \\ \hline 81 \\ - 81 \\ \hline 0 \end{array}$$

b)  $4\,896 : 8 = 612$

$$\begin{array}{r} 4896 \quad | \quad 8 \\ - 48 \quad \downarrow \\ \hline 009 \\ - 8 \quad \downarrow \\ \hline 16 \\ - 16 \\ \hline 0 \end{array}$$

c)  $4\,963 : 7 = 709$

$$\begin{array}{r} 4963 \quad | \quad 7 \\ - 49 \quad \downarrow \\ \hline 006 \\ - 0 \quad \downarrow \\ \hline 63 \\ - 63 \\ \hline 0 \end{array}$$

- a)  $3\,975 : 3 =$       c)  $4\,985 : 5 =$       e)  $4\,256 : 7 =$   
 b)  $4\,648 : 4 =$       d)  $2\,706 : 6 =$       f)  $3\,872 : 8 =$



### Nsuzuma ngusuzume

Ifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $:$  na  $=$

- A) 

|       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|
| 4 095 | 4 563 | 4 956 | 4 864 | 3 966 | 4 868 | 4 896 |
|-------|-------|-------|-------|-------|-------|-------|

  
 B) 

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 5 | 9 | 7 | 8 | 6 | 4 | 3 |
|---|---|---|---|---|---|---|

  
 C) 

|       |     |     |     |       |     |     |
|-------|-----|-----|-----|-------|-----|-----|
| 1 632 | 608 | 708 | 819 | 1 217 | 661 | 507 |
|-------|-----|-----|-----|-------|-----|-----|

- Ufate ikarita imwe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cyo  $:$
- Ukurikizeho ikarita yo muri B iteganye n'iyo wafashe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Uhitemo igisubizo mu makarita yo muri C

### Nsobanukiwe ko:

Iyo ugabanya imibare ukora ibi bikurikira:

1. Wandika imibare mu mahembe
2. Uhera ku binyagihumbi ugabanya; ugakurikizaho ibinyajana; hagakurikiraho ibinyacumi; ugaheruka ibinyabumwe.
3. Iyo ibinyagihumbi ari bike ugereranyije n'ikigabanya ufatira hamwe ibinyagihumbi n'ibinyajana.
4. Iyo ibyasigaye ku binyagihumbi n'ibinyajana hiyongereyeho n'ibinyacumi ari bike ugereranyije n'ikigabanya ushyiramo zeru (0) ugakuramo hanyuma ukamanura ibinyabumwe.



### Reka nisuzume

- Gabanya a)  $4\,985 : 5 =$       c)  $2\,736 : 9 =$   
 b)  $3\,872 : 8 =$       d)  $4\,963 : 7 =$

## Imyitozo



- 1) Itegereze imbonerahamwe ushake ikigabanyo k'imibare ikurikira:

|   | 1     | 2     | 3     | 4     | 5     |
|---|-------|-------|-------|-------|-------|
| A | 4 765 | 4 698 | 3 584 | 2 976 | 4 563 |
| B | 5     | 6     | 7     | 8     | 9     |

- a) A 1 na B 1      c) A 3 na B 3      e) A 5 na B 5  
 b) A 2 na B 2      d) A 4 na B 4      f) A 4 na B 2
- 2) Shaka imibare y'imibarwa 3 yagabanyijwe n'umubare w'umubarwa 1 kugira ngo haboneke ibigabanyo bikurikira:
- a)  $\_ : 5 = 153$       b)  $\_ : 4 = 124$       c)  $\_ : 6 = 496$

## 2.14 Amahurizo yo kugabanya

### Urugero:

Gabanya ku buryo bungana inzitiramibu 4 875, imidugudu 5. Buri mudugudu uzahabwa inzitiramibu zingahe?

| Ibyo mfite                                                       | Ibyo mbazwa                                   | Inzira nigusubizo                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Umubare w'inzitiramibu zose ni 4 875<br>Umubare w'imidugudu ni 5 | Umubare w'inzitiramibu buri mudugudu uzahabwa | Umubare w'inzitiramibu buri mudugudu uzahabwa<br>$= 4\,875 : 5 = 975$<br>$\begin{array}{r} 4875 \quad 5 \\ - 45 \phantom{00} \\ \hline 037 \phantom{00} \\ - 35 \phantom{00} \\ \hline 25 \phantom{00} \\ - 25 \phantom{00} \\ \hline 00 \end{array}$<br>Buri mudugudu uzahabwa inzitiramibu 975 |

### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ririmo kugabanya imibare:

1. Werekana ibyo baguhaye mu ihurizo
2. Werekana ibyo bakubaza mu ihurizo
3. Wandika imibare wahawe mu ihurizo mu mahembe maze ukayigabanya hanyuma ukandika ikigabanyo.



### Nsuzuma ngusuzume

- 1) Ibigo by'amashuri 9 byasaranganyijwe ibitabo by'imibare 4 581 ku buryo bungana. Buri kigo cyahawe ibitabo bingahe?
- 2) Ibigo nderabuzima 7 byatewe inkunga y'ibitanda 4 991. Ibyo bitanda babigabanye ku buryo bungana. Buri kigo nderabuzima cyahawe ibitanda bingahe?
- 3) Gabanya ku buryo bungana ingemwe z'ikawa 4 986, imirenge 9. Buri murenge uzahabwa ingemwe zingahe?
- 4) Mbabazi asarura inansi 3 795 mu bihembwe 5 by'ihinga. Shaka umubare w'inansi asarura buri muri buri gihembwe k'ihinga niba asarura inansi zingana buri gihembwe.



### Reka nisuzume

- 1) Ibigo by'amashuri 8 byo mu karere kacya byahawe inkunga y'intebe 3 848. Shaka umubare w'intebe buri kigo cyabonye niba barazigabanye ku buryo bungana?
- 2) Gabanya ku buryo bungana amabati 2 598, abubatsi 6. Buri mwubatsi azahabwa amabati angahe?
- 3) Umucuruzi agemura amashuri 4 764 mu bigo bya gisirikari 4. Ubwo buri kigo gihabwa amashuri angahe niba buri kigo kibona amashuri angana n'ay'ikindi kigo?
- 4) Uwamahoro acuruza imifuka ya sima 4 365 mu mezi 3. Shaka umubare w'imifuka ya sima acuruza mu kwezi kumwe niba acuruza sima zingana buri kwezi.

## 2.15 Isuzuma risoza umutwe wa 2

- 1) Andika 4 978 mu magambo
- 2) Shaka umubare wasesenguwe
  - a)  $b\ 7\ c\ 5\ h\ 4\ j\ 9 =$
  - b)  $b\ 9\ h\ 3\ c\ 6\ j\ 7 =$
- 3) Mutahure imibare yasesenguwe
  - a)  $(4 \times 1\ 000) + (8 \times 100) + (7 \times 10) + (5 \times 1) =$
- 4) Andika umwanya w'imibarwa icyeho akarongo
  - a)  $3\ 58\underline{6}$
  - b)  $\underline{2}\ 789$
  - c)  $4\ 3\underline{6}2$
  - d)  $3\ \underline{9}78$
- 5) Gereranya ukoresheje  $<$ ,  $>$  na  $=$ 
  - a)  $4\ 659$    $4\ 695$
  - b)  $4\ 871$    $4\ 867$
- 6) Tondeka uhareye ku mubare muto ujya ku munini  
 $4\ 879, 4\ 897, 4\ 798, 4\ 789, 4\ 987, 4\ 978$
- 7) Tondeka uhareye ku munini ujya ku muto  
 $3\ 687, 3\ 678, 3\ 768, 3\ 786, 3\ 867, 3\ 876$
- 8) Shaka igiteranyo k'imibare ikurikira:
  - a)  $3\ 154 + 1\ 659 =$
  - b)  $3\ 876 + 1\ 112 =$
- 9) Shaka ikinyuranyo k'imibare ikurikira:
  - a)  $4\ 587 - 3\ 267 =$
  - b)  $3\ 967 - 2\ 563 =$
- 10) Shaka igikubo k'imibare ikurikira
  - a)  $\begin{array}{r} 412 \\ \times 12 \\ \hline \end{array}$
  - b)  $\begin{array}{r} 105 \\ \times 47 \\ \hline \end{array}$
  - c)  $\begin{array}{r} 209 \\ \times 19 \\ \hline \end{array}$
  - d)  $\begin{array}{r} 124 \\ \times 35 \\ \hline \end{array}$
  - e)  $\begin{array}{r} 137 \\ \times 36 \\ \hline \end{array}$
- 11) Shaka ikigabanyo k'imibare ikurikira
  - a)  $4\ 959 : 9 =$
  - b)  $3\ 785 : 5 =$
  - c)  $2\ 988 : 6 =$
- 12) Mu kagari ka Nyakabanda hatuye abagore 879, abagabo 839 n'abana 3 267. Shaka umubare w'abaturage bose.
- 13) Amahugurwa yitabiriwe n'abantu 4 789. Abagore bari 2 097. Shaka umubare w'abagabo.
- 14) Ku muganda buri rugo rwateye ibiti 18. Shaka umubare w'ibiti byatewe mu kagari kacu niba karimo ingo 276.
- 15) Gabanya ku buryo bungana imifuka y'isima 4 298 abacuruzi 7. Buri mucuruzi azahabwa imifuka ingahe?

# Imibare kuva kuri 0 kugera ku 10 000



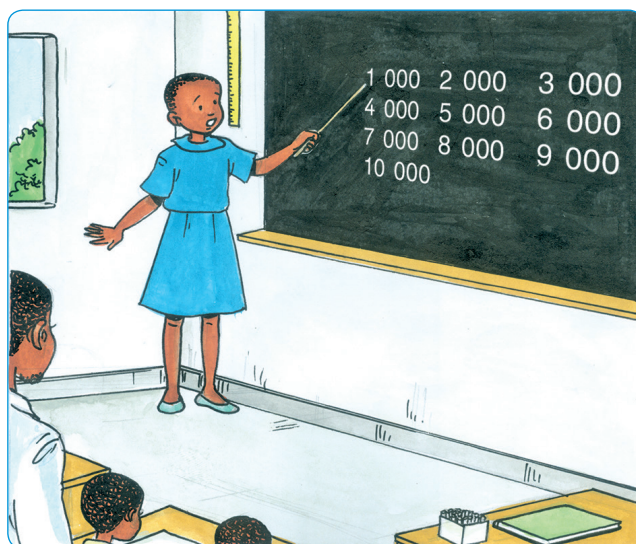
Gakire ni umuhinzi mworozzi. Yeza imifuka myinshi y'ibishyimbo n'ibigori. Agurisha amata y'inka ze n'amagi. Ariko ntamenya ibyo yagurishije uko bingana. Wamufasha iki kugira ngo akore akazi ke neza kurushaho?



## 3.1 Gusoma imibare kuva kuri 0 kugera ku 10 000

### Igikorwa cya 1

Mwitegereze maze musome imibare iri ku ishusho.



### Nsuzuma ngusuzume

Mukore imirongo ine imbere y'agakarito karimo udupapuro twanditseho imibare. Buri wese age atombora agapapuro kamwe asome umubare wanditseho aranguruye ijwi.

## Imyitozo

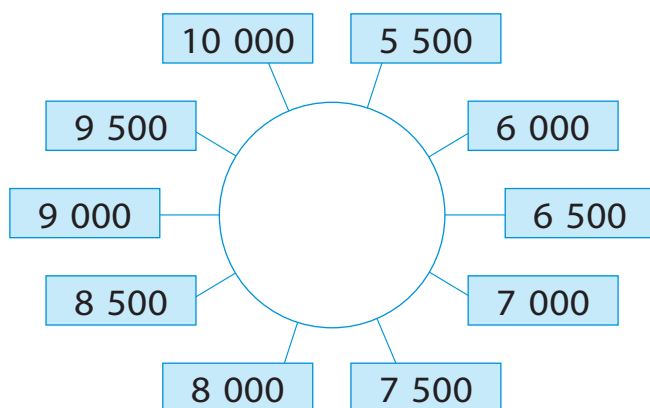


Mukoreshe amakarita y'imibare mukore imibare iri hagati ya 5 000 na 10 000 muyisomere abandi.

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 0 |

## Igikorwa cya 2

Musome imibare iri kuri uru ruziga muhereye ku muto mujya ku munini.



## Reka nisuzume



Fata amakarita yanditseho imibare ikurikira:

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|---|---|---|---|---|---|---|---|---|---|

Ukore imibare iri hagati ya

- |                   |                   |
|-------------------|-------------------|
| 1) 5 000 na 5 100 | 4) 7 400 na 7 500 |
| 2) 5 500 na 5 600 | 5) 8 600 na 8 700 |
| 3) 6 200 na 6 300 | 6) 9 800 na 9 900 |

Ikitonderwa: Buri mubarwa ukora inshuro imwe mu mubare



### 3.2 Kwandika imibare kuva kuri 0 kugera ku 10 000

#### Igikorwa

Mukoreshe amakarita y'imibare mwahawe mukore imibare 3 mwihitiyemo iri hagati ya 5 000 na 10 000. Muyandike mu magambo hanyuma muyisomere bagenzi banyu.

Ikitonderwa: Buri mubarwa ukora inshuro imwe mu mubare

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 0 |



#### Nsuzuma ngusuzume

Mukoreshe amakarita y'imibare mwahawe, mukore imibare 5 mwihitiyemo iri hagati ya 5 000 na 10 000, muyandike mu magambo hanyuma muyisomere abandi.

Ikitonderwa: Buri mubarwa ukora inshuro imwe mu mubare

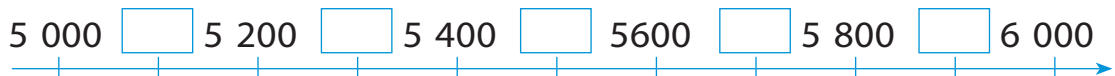
|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 0 |

#### Imyitozo



Mushake imibare ibura kuri uyu murongo w'ibara, muyisome munayandike mu magambo.

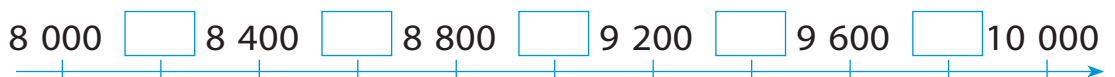
a)



b)



c)





## Reka nisuzume



Shaka imibare wabajijwe hanyuma uyandike mu mibare no mu magambo: Imibare yose iri hagati ya

- 1) 5 017 na 5 020      3) 7 050 na 7 055      5) 9 121 na 9 123  
2) 6 031 na 6 033      4) 8 097 na 8 00      6) 9 266 na 9 269

## Imyitozo



- 1) Andika mu mibare cyangwa mu magambo  
a) 9 249:  
b) Ibihumbi bitandatu magana inani na cumi n'ikenda:  
2) Koresha amakarita y'imibare akurikira ukore nibura imibare 6 iri hagati ya 5 000 na 10 000 uyisome kandi uyandike mu mibare no mu magambo.

8      2      3      4

- 3) Uzuza uyu murongo w'ibara



- 4) Soma imibare iri muri iyi mbonerahamwe  
a) lyanditse mu magambo uyandike mu mibare  
b) lyanditse mu mibare uyandike mu magambo

|   |                                               |   |                                                                   |   |                                               |
|---|-----------------------------------------------|---|-------------------------------------------------------------------|---|-----------------------------------------------|
| a | 9 794: ...                                    | d | Ibihumbi bitandatu magana inani na gatanu: ...                    | g | 6 732: ...                                    |
| b | Ibihumbi birindwi magana atatu na gatanu: ... | e | 5 936 ...                                                         | h | Ibihumbi umunani magana arindwi n'ikenda: ... |
| c | 8 935: ...                                    | f | Ibihumbi ikenda na magana atanu na mirongo itanu na karindwi: ... | i | 8 719: ...                                    |

### 3.3 Gusesengura imibare kuva kuri 0 kugera ku 10 000

#### Igikorwa cya 1

- 1) Mwandike imibare ikurikira mu mbonerahamwe y'ibara mukurikiza urugero mwahawe.

#### Urugero:

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
| 5                    | 4                 | 6                 | 5                  |

- a) 5 465                      c) 7 968                      e) 9 539  
b) 6 392                      d) 8 974                      f) 6 749
- 2) Mukoreshe imbonerahamwe y'ibara, mushyire umubare mu mwanya wawo.
- a) 8 654 = h \_ j \_ c \_ b \_  
b) 6 974 = c \_ h \_ b \_ j \_  
c) 7 935 = j \_ b \_ h \_ c \_  
d) 5 923 = b \_ j \_ c \_ h \_  
e) 6 179 = c \_ j \_ h \_ b \_  
f) 9 756 = j \_ b \_ h \_ c \_
- 3) Mwandike umubare wasesenguwemo ibinyagihumbi (h), ibinyajana (j), ibinyacumi (c) n'ibinyabumwe (b).
- a) h 6 c 7 b 5 j 3 =                      d) c 5 j 8 h 8 b 9 =  
b) b 9 j 6 h 7 c 1 =                      e) b 7 c 9 h 9 j 9 =  
c) j 7 b 4 c 6 h 5 =                      f) c 9 h 7 b 4 j 4 =

#### Nsobanukiwe ko:

- Agaciro k'ibinyagihumbi (h) ari Umubare wabyo  $\times 1\,000$
- Agaciro k'ibinyajana (j) ari Umubare wabyo  $\times 100$
- Agaciro k'ibinyacumi (c) ari Umubare wabyo  $\times 10$
- Agaciro k'ibinyabumwe (b) ari Umubare wabyo  $\times 1$

## Igikorwa cya 2

Musesengure imibare mo ibinyagihumbi (h), ibinyajana (j), ibinyacumi (c) n'ibinyabumwe (b) mukurikije urugero mwahawe.

### Urugero:

- 1)  $8\,745 = 8\,000 + 700 + 40 + 5$
- 2)  $9\,537 = (9 \times 1\,000) + (5 \times 100) + (3 \times 10) + (7 \times 1)$
- 3)  $7\,853 =$  Ibinyagihumbi 7 + Ibinyajana 8 + Ibinyacumi 5 + Ibinyabumwe 3

- |               |               |               |
|---------------|---------------|---------------|
| a) $6\,248 =$ | d) $7\,649 =$ | g) $9\,761 =$ |
| b) $5\,879 =$ | e) $6\,719 =$ | h) $7\,367 =$ |
| c) $7\,574 =$ | f) $8\,659 =$ | i) $8\,625 =$ |



### Nsuzuma ngusuzume

Mutahure imibare yasesenguwe

- a)  $(8 \times 1\,000) + (5 \times 100) + (4 \times 10) + (7 \times 1) =$
- b)  $9\,000 + 800 + 70 + 6 =$
- c) Ibinyagihumbi 7 + Ibinyajana 2 + Ibinyacumi 5 =

### Imyitozo

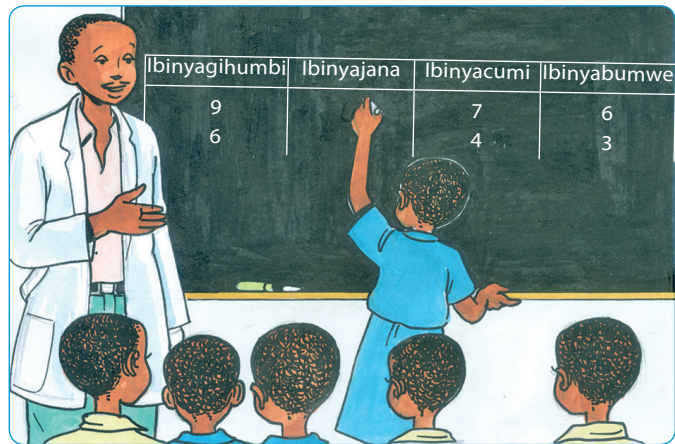


- 1) Koresha imbonerahamwe y'ibara uvuge umwanya w'imibarwa icyeho akarongo
  - a) 9 465                      c) 7 2 37                      e) 5 871
  - b) 8 95 7                      d) 6 95 8                      f) 6 5 97
- 2) Shaka umubare wasesenguwemo ibinyagihumbi (h), ibinyajana (j), ibinyacumi (c) n'ibinyabumwe (b).
  - a) b 8 h 5 c 7 j 9 =                      d) j 5 b 8 c 7 h 2 =
  - b) b 3 c 6 h 3 j 1 =                      e) j 8 b 2 h 9 c 7 =
  - c) c 3 h 7 b 6 j 7 =                      f) b 3 h 8 c 7 j 6 =
- 3) Sesengura imibare mo ibinyagihumbi (h), ibinyajana (j), ibinyacumi (c) n'ibinyabumwe (b) mu mibare ikurikira.
  - a)  $8\,567 =$                       c)  $9\,615 =$                       e)  $6\,435 =$
  - b)  $7\,526 =$                       d)  $6\,452 =$                       f)  $7\,361 =$

### 3.4 Kugereranya imibare 2 itarenze 10 000

#### Igikorwa cya 1

Mukurikize ibyo mwigereje ku gishushanyo n'urugero mwahawe mugereranye imibare ikurikira.



#### Urugero:

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
| 9                    | 8                 | 7                 | 6                  |
| 6                    | 5                 | 4                 | 3                  |

6 543 Urutwa na 9 876 bikandikwa gutya:  $6\,543 < 9\,876$

a) 7 456  8 336      b) 9 576  9 321

#### Nsobanukiwe ko:

Iyo ugereranya imibare ibiri wita kuri ibi bikurikira:

- Uhera ku binyagihumbi ugana ku binyabumwe ukagenda ugereranya buri mubare.
- Iyo ibinyagihumbi bingana uhita ugereranya ibinyajana
- Iyo ibinyajana bingana uhita ugereranya ibinyacumi
- Iyo ibinyacumi bingana ugereranya ibinyabumwe
- Ibyo byose iyo birangiye wamenye umubare umunini n'umuto cyangwa wabonye ko imibare ingana ukoresha ibimenyetso by'igereranya ari byo:  $<$  (Birutwa),  $>$  (Biruta) na  $=$  (Bihwanye)

## Igikorwa cya 2

Mutombore amakarita yanditseho imibare n'andi ariho ibimenyetso by'igereranya, mugereranye imibare mufite.

Urugero:

7 649

<

8 295

a)

7 649

6 930

7 850

<

>

=

b)

5 315

6 479

8 295

## Igikorwa cya 3

Koresha <, > na = ugereranye

a) 9 723  9 327

d) 8 617  6 817

b) 6 472  6 742

e) 5 241  7 514

c) 7 215  7 152

f) 6 072  6 072



Nsuzuma ngusuzume

Mwitegereze iyi shusho maze mugereranye imibare y'abaturage bafite ubwisungane mu kwivuza batuye mu tugari tugize Umurenge wa Nyakabanda.

| Abafite Mituweri mu Murenge wa Nyakabanda |         |
|-------------------------------------------|---------|
| Akagari                                   | Umubare |
| Nyakabanda I                              | 7865    |
| Nyakabanda II                             | 9876    |
| Munanira I                                | 8654    |
| Munanira II                               | 6896    |

1) Ibibazo

- Ni akahe kagari gafite abaturage bake bafite ubwisungane mu kwivuza?
- Ni akahe kagari gafite abaturage benshi bafite ubwisungane mu kwivuza?

2) Mukoresheje <, > na = mugereranye

- Umubare w'abaturage bafite mituweri mu kagari ka Nyakabanda I n'abo mu kagari ka Nyakabanda II
- Umubare w'abaturage bafite mituweri mu kagari ka Nyakabanda I n'abo mu kagari ka Munanira I

- c) Umubare w'abaturage bafite mituweri mu kagari ka Nyakabanda I n'abo mu kagari ka Munanira II
- d) Umubare w'abaturage bafite mituweri mu kagari ka Nyakabanda II n'abo mu kagari ka Munanira I
- e) Umubare w'abaturage bafite mituweri mu kagari ka Nyakabanda II n'abo mu kagari ka Munanira II.
- f) Umubare w'abaturage bafite mituweri mu kagari ka Nyakabanda I n'abo mu kagari ka Nyakabanda II
- g) Umubare w'abaturage bafite mituweri mu kagari ka Munanira I na Munanira II.



### Reka nisuzume



Koresha  $<$ ,  $>$  na  $=$  ugereranye abarwayi bivuriza mu bitaro byitiriwe umwami Fayisali buri cyumweru.

| Abagabo | Abagore | Abana |
|---------|---------|-------|
| 1 678   | 2 087   | 6 167 |

- a) Umubare w'abagore n'uw'abagabo bahivuriza buri muni
- b) Umubare w'abagore n'uw'abana bahivuriza buri muni
- c) Umubare w'abagabo n'uw'abana bahivuriza buri muni

### Imyitozo



Mukoreshe  $<$ ,  $>$  na  $=$  mugereranye imibare ikurikira

- a) 8 459  8 459
- b) 7 384  7 249
- c) 9 628  9 657
- d) 5 493  5 234
- e) 6 734  6 734
- f) 7 835  8 435
- g) 5 919  9 919
- h) 6 828  8 821
- i) 7 732  7 732
- j) 8 643  6 643

### 3.5 Gutondeka imibare kuva ku 2 000 kugera ku 10 000

#### A. Gutondeka imibare kuva ku muto ujya ku munini

##### Igikorwa cya 1

Mukoreshe amakarita mwigane ibiri gukorwa kuri iyi shusho mutondeke imibare muhereye ku muto mujya ku munini.



- 1) 6 439, 9 825, 7 564, 8 943, 9 754
- 2) 5 482, 6 357, 7 845, 8 015, 6 497
- 3) 5 739, 9 384, 8 049, 7 193, 7 496
- 4) 9 437, 8 391, 6 427, 7 409, 8 274

##### Nsobanukiwe ko:

- Iyo utondeka imibare uva ku muto ujya ku munini ukoresha imbonerahamwe y'ibara.
- Ukabanza ukagereranya ibinyagihumbi byose, ugakurikizaho ibinyajana, ibinyacumi kugeza ubonye uko imibare yose ikurikirana ukayitondeka uhereye ku mubare muto ujya ku munini.



## Igikorwa cya 2

Tondeka iyi mibare uhereye ku muto ujya ku munini ukurikije urugero wahawe.

**Urugero:** 6 572, 7 852, 5 792, 7 562

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
| 5                    | 7                 | 9                 | 2                  |
| 6                    | 5                 | 7                 | 2                  |
| 7                    | 5                 | 6                 | 2                  |
| 7                    | 8                 | 5                 | 2                  |

Igisubizo: 5 792, 6 572, 7 562, 7 852

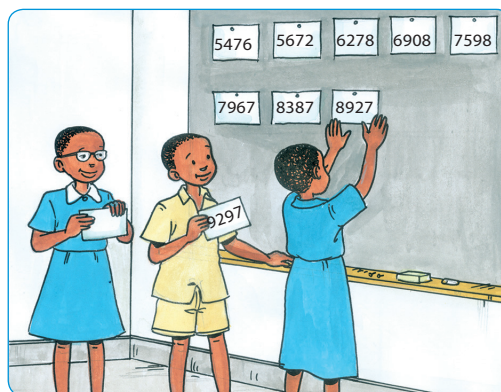
- 1) 7 804, 6 218, 5 386                      2) 7 358, 6 804, 5 748

## B. Gutondeka imibare kuva ku munini ujya ku muto

### Igikorwa cya 1

Mukoreshe amakarita mwigana ibiri gukorwa ku ishusho mutondeke imibare muhereye ku munini mujya ku muto.

- 1) 5 734, 9 354, 6 507  
2) 6 709, 9 675, 5 084  
3) 6 901, 8 654, 5 789  
4) 6 057, 8 765, 5 293



### Nsobanukiwe ko:

Iyo utondeka imibare uva ku munini ujya ku muto ukoresha imbonerahamwe y'ibara ukabanza ukagereranya ibinyagihumbi, ugakurikizaho ibinyajana, ibinyacumi kugeza ubonye uko imibare yose ikurikirana, ukayitondeka uva ku munini ujya ku muto.

## Igikorwa cya 2

Tondeka iyi mibare uhereye ku mubare munini ujya ku muto ukurikije urugero wahawe.

**Urugero:** 9 126, 8 965, 5 869, 6 739, 7 629, 8 469

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
| 5                    | 7                 | 3                 | 5                  |
| 5                    | 6                 | 4                 | 7                  |
| 4                    | 5                 | 2                 | 6                  |
| 4                    | 4                 | 5                 | 2                  |

Igisubizo:  $9\ 126 > 8\ 965 > 8\ 469 > 7\ 629 > 6\ 739 > 5\ 869$

- |                        |                        |
|------------------------|------------------------|
| 1) 7 483, 8 534, 5 192 | 3) 8 976, 7 456, 6 012 |
| 2) 7 345, 9 567, 6 978 | 4) 7 105, 9 271, 6 823 |



### Reka nisuzume



Tondeka uhereye ku mubare munini ujya ku muto

- a) 6 015, 7 247, 8 156, 9 375  
b) 7 245, 7 254, 7 524, 7 542

### Imyitozo



- 1) Tondeka uhereye ku mubare muto ujya ku munini
- a) 9 876, 7 869, 8 687  
b) 5 678, 7 856, 7 658  
c) 7 654, 5 746, 6 475  
d) 7 896, 7 689, 7 869
- 2) Tondeka uhereye ku mubare munini ujya ku muto
- a) 5 923, 9 325, 5 392  
b) 6 541, 5 146, 6 154  
c) 6 789, 7 698, 9 876  
d) 8 279, 8 972, 8 729

### 3.6 Guteranya imibare igiteranyo cyayo kitarenze 10 000

#### A. Iteranya ritabitsa

##### Igikorwa

Kurikiza urugero wahawe, uteranye imibare ikurikira:

**Urugero:**  $5\,432 + 4\,567 = 9\,999$

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
| 5                    | 4                 | 3                 | 2                  |
| + 4                  | 5                 | 6                 | 7                  |
| 9                    | 9                 | 9                 | 9                  |

- a)  $6\,543 + 2\,310$     b)  $4\,567 + 3\,421$     c)  $5\,123 + 3\,754$     d)  $9\,217 + 682$     e)  $8\,012 + 987$

##### Nsobanukiwe ko:

Iyo uteranya imibare ukora ibi bikurikira:

- Kwandika imibare mu mbonerahamwe y'ibara
- Gukoresha utubarisho ugahera ku binyabumwe uteranya ugaheruka ibinyagihumbi.
- Kwandukura igiteranyo.



##### Reka nisuzume

Muteranye imibare ikurikira:

- a)  $4\,125 + 3\,873 =$     c)  $5\,234 + 4\,543 =$     e)  $5\,715 + 4\,054 =$   
b)  $3\,756 + 132 =$     d)  $3\,256 + 732 =$     f)  $4\,650 + 4\,239 =$



##### Nsuzuma ngusuzume

Mwifashishe amakarita y'imibare n'ibimenyetso byo  $+$  na  $=$

- A)  $4\,567$   $5\,678$   $6\,123$   $7\,345$   $8\,012$   $9\,456$   $4\,567$   
B)  $5\,231$   $4\,321$   $2\,874$   $1\,643$   $1\,986$   $442$   $4\,302$   
C)  $9\,898$   $8\,997$   $9\,798$   $8\,988$   $9\,999$   $9\,998$   $8\,869$

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cyo  $+$
- Mukurikizeho ikarita yo muri B iteganye n'iyiyo wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C

### Imyitozo



- a)  $5643 + 256 =$                       c)  $4572 + 4316 =$   
 b)  $7215 + 2784 =$                       d)  $4567 + 421 =$

### B. Iteranya ribitsa

#### Igikorwa

Kurikiza urugero wahawe uteranye imibare ikurikira:

Urugero:  $7\ 698 + 1\ 479 = 9\ 177$

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
| 1                    | 1                 | 1                 |                    |
| 7                    | 6                 | 9                 | 8                  |
| + 1                  | 4                 | 7                 | 9                  |
| 9                    | 1                 | 7                 | 7                  |

- a)  $4\ 989$     b)  $5\ 345$     c)  $6\ 578$     d)  $8\ 123$     e)  $7\ 145$   
 $+ 3\ 465$      $+ 2\ 987$      $+ 2\ 456$      $+ 1\ 098$      $+ 1\ 879$

#### Nsobanukiwe ko:

Iyo uteranya imibare isaba kubitsa ukora ibi bikurikira:

1. Guca imbonerahamwe y'ibara ukayandikamo imibare
2. Gukoresha utubarisho ugahera ku binyabumwe uteranya
3. Iyo igiteranyo k'ibinyabumwe kigizwe n'imibara 2 wandika ikinyabumwe k'icyo giteranyo maze ukabitsa ikinyacumi ku binyacumi, ukabiteranya, ugakomeza utyo no ku yindi myanya, ukandukura igiteranyo



## Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $+$  na  $=$

A)  $3\ 294$   $6\ 095$   $5\ 324$   $4\ 852$   $2\ 698$   $7\ 689$   $8\ 437$

B)  $5\ 789$   $2\ 987$   $3\ 678$   $4\ 897$   $6\ 574$   $1\ 567$   $1\ 389$

C)  $9\ 826$   $9\ 272$   $9\ 083$   $9\ 749$   $9\ 256$   $9\ 082$   $9\ 002$

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cyo  $+$
- Mukurikizeho ikarita yo muri B iteganye n'iyo wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C



## Reka nisuzume

Teranya imibare ikurikira

a)  $1\ 943 + 7\ 689 =$

d)  $4\ 239 + 4\ 876 =$

b)  $2\ 976 + 6\ 387 =$

e)  $5\ 795 + 3\ 498 =$

c)  $3\ 987 + 5\ 679 =$

f)  $6\ 467 + 2\ 944 =$

## Imyitozo

a)  $\begin{array}{r} 7\ 568 \\ + 1\ 928 \\ \hline \end{array}$  b)  $\begin{array}{r} 8\ 532 \\ + 987 \\ \hline \end{array}$  c)  $\begin{array}{r} 9\ 274 \\ + 389 \\ \hline \end{array}$  d)  $\begin{array}{r} 6\ 765 \\ + 2\ 579 \\ \hline \end{array}$  e)  $\begin{array}{r} 4\ 723 \\ + 5\ 187 \\ \hline \end{array}$

## 3.7 Amahurizo yo guteranya imibare igiteranyo cyayo kitarenze 10 000

### Urugero:

Ishyirahamwe ryateye ingemwe z'amashu 4 567 ku wa mbere bukeye bwaho ku wa kabiri ritera izindi 3 978. Ubwo ryateye ingemwe zingahe muri icyo minsi uko ari ibiri?

| Ibyo mfite mu ihurizo                         | Ibyo mbazwa                             | Inzira n'igisubizo                                                                |
|-----------------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------|
| Umubare w'ingemwe zatewe ku wa mbere ni 4 567 | Umubare w'ingemwe zatewe mu minsi ibiri | Umubare w'ingemwe zatewe mu minsi ibiri =<br>$4\,567 + 3\,978 =$<br>Ingemwe 8 545 |
| Umubare w'ingemwe zatewe kuwa kabiri ni 3 978 |                                         | $\begin{array}{r} 1\,11 \\ 4\,567 \\ + 3\,978 \\ \hline 8\,545 \end{array}$       |

### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ryo guteranya imibare ukora ibi bikurikira:

1. Kuvana mu ihurizo ibyo baguhaye
2. Kuvana mu ihurizo ibyo bakubaza
3. Gutondeka ibyo wahawe impagarike ukabiteranya.



### Nsuzuma ngusuzume

- 1) Uyu mwaka mu Karere ka Huye hakingiwe abana b'abahungu 5 321 n'ab'abakobwa 3 789. Ubwo hakingiwe abana bangahe?
- 2) Umwaka ushize ishyirahamwe rihinga ikawa ryateye ibiti 3 657 naho uyu mwaka rimaze gutera ibiti 5 794. Ubwo iri shyirahamwe rifite ibiti by'ikawa bangahe byose hamwe?
- 3) Mu Karere hatanzwe inka 3 576 muri gahunda ya Girinka Munyarwanda naho mu kandi Karere hatangwa 5 879. Utwo turere twombi twahawe inka zingahe?
- 4) Muri kaminuza higa abahungu 4653 n'abakobwa 4 978. Iryo shuri ryigamo abanyeshuri bangahe?



## Reka nisuzume



- 1) Umupira w'amaguru wahuje Akarere ka Gasabo n'Akarere ka Kicukiro witabiriwe n'abafana b'abagabo 7 543 n'ab'abagore 1 978. Shaka igiteranyo cy'abafana bitabiriye uwo mukino.
- 2) Mu ibarura ryashize basanze Umurenge wa Kamurehe urimo ingo 4 987 naho uwa Kabuye urimo ingo 4 678. Iyo mirenge yombi irimo ingo zingahe?
- 3) Ikigo gitubura ibitabo cyahaye Akarere ka Karongi ibitabo by'imibare 5 423 naho Akarere ka Ngororero gahabwa 3 798. Utwo turere twombi twahawe ibitabo bingahe?
- 4) Uruganda rukora amasabune rwakoze amakarito 3 456 ukwezi gushize naho uku kwezi rwakoze amakarito 4 649. Shaka umubare w'amakarito rufite mu bubiko.

## 3.8 Gukuramo imibare itarenze 10 000

### A. Ikuramo ridatira ry'imibare itarenze 10 000

#### Igikorwa

Mukuremo imibare ikurikira mukurikije urugero mwahawe:

**Urugero:**  $6\,789 - 5\,676 = 1\,113$

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
| 6                    | 7                 | 8                 | 9                  |
| - 5                  | 6                 | 7                 | 6                  |
| 1                    | 1                 | 1                 | 3                  |

- a)  $\begin{array}{r} 8\,569 \\ - 5\,417 \\ \hline \end{array}$     b)  $\begin{array}{r} 9\,738 \\ - 6\,315 \\ \hline \end{array}$     c)  $\begin{array}{r} 7\,686 \\ - 5\,452 \\ \hline \end{array}$     d)  $\begin{array}{r} 8\,679 \\ - 7\,543 \\ \hline \end{array}$     e)  $\begin{array}{r} 6974 \\ - 6432 \\ \hline \end{array}$



## Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $-$  na  $=$

A)  $9\ 876$   $8\ 567$   $7\ 456$   $6\ 345$   $9\ 234$   $8\ 456$   $7\ 986$

B)  $7\ 645$   $5\ 435$   $4\ 142$   $4\ 203$   $6\ 023$   $5\ 031$   $3\ 654$

C)  $2\ 142$   $4\ 332$   $3\ 425$   $2\ 231$   $3\ 314$   $3\ 211$   $3\ 132$

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cyo  $-$
- Mukurikizeho ikarita yo muri B iteganye n'iyi wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C

### Nsobanukiwe ko:

Iyo ukuramo imibare ukora ibi bikurikira:

1. Guca imbonerahamwe y'ibara ukandikamo imibare
2. Gukoresha utubarisho ugahera ku binyabumwe ukuramo ugaherukira ku binyagihumbi.
3. Kwandukura ikinyuranyo ubonye.



## Reka nisuzume

Kuramo imibare ikurikira

a)  $9\ 745 - 5\ 203 =$

d)  $6\ 789 - 5\ 456 =$

b)  $7\ 256 - 4\ 032 =$

e)  $5\ 876 - 4\ 674 =$

c)  $8\ 769 - 3\ 539 =$

f)  $9\ 863 - 4\ 730 =$

### Imyitozo

a) 
$$\begin{array}{r} 8\ 589 \\ - 5\ 046 \\ \hline \end{array}$$

b) 
$$\begin{array}{r} 7\ 953 \\ - 5\ 720 \\ \hline \end{array}$$

c) 
$$\begin{array}{r} 6\ 789 \\ - 5\ 417 \\ \hline \end{array}$$

d) 
$$\begin{array}{r} 5\ 765 \\ - 3\ 612 \\ \hline \end{array}$$



## B. Ikuramo ritira ry'imibare itarenze 10 000

### Igikorwa

Mukore ibibazo bikurikira mukurikije urugero mwahawe;

Urugero:  $9\ 531 - 6\ 789 = 2\ 742$

| Ibinyagihumbi<br>(h) | Ibinyajana<br>(j) | Ibinyacumi<br>(c) | Ibinyabumwe<br>(b) |
|----------------------|-------------------|-------------------|--------------------|
|                      | 14                | 12                | 11                 |
| 8                    | 4                 | 2                 |                    |
| <del>9</del>         | <del>5</del>      | <del>3</del>      | 1                  |
| - 6                  | 7                 | 8                 | 9                  |
| 2                    | 7                 | 4                 | 2                  |

- a)  $7\ 234 - 5\ 897$     b)  $6\ 013 - 5\ 739$     c)  $9\ 543 - 8\ 796$     d)  $8\ 250 - 6\ 592$     e)  $5\ 123 - 2\ 768$



### Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $-$  na  $=$

- A)  $5\ 321$   $6\ 024$   $7\ 431$   $8\ 143$   $9\ 012$   $6\ 503$   $8\ 432$   
 B)  $2\ 789$   $4\ 658$   $5\ 865$   $6\ 759$   $8\ 945$   $3\ 967$   $6\ 579$   
 C)  $2\ 536$   $1\ 853$   $1\ 384$   $1\ 366$   $2\ 532$   $67$   $1\ 566$

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cyo  $-$
- Mukurikizeho ikarita yo muri B iteganye n'iyi wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C

### Nsobanukiwe ko:

Iyo ukuramo imibare isaba gutira ukora ibi bikurikira:

1. Guca imbonerahamwe y'ibara ukandikamo imibare, umunini hejuru y'umuto.
2. Gukoresha utubarisho ugahera ku binyabumwe ukuramo.
3. Iyo ibinyabumwe byo gukurwamo birutwa n'ibinyabumwe bikurwamo utira 1 ringana n'ibinyabumwe 10 ku binyacumi by'umubare ukurwamo ukabyongera ku binyabumwe wari usanganwe maze ugakuramo ukandika ikinyuranyo.
4. Ukomeza utyo ku yindi myanya ikurikiye kugeza urangije.



### Reka nisuzume



Kuramo imibare ikurikira

- |                        |                        |
|------------------------|------------------------|
| a) $9\ 013 - 7\ 457 =$ | d) $6\ 543 - 4\ 675 =$ |
| b) $8\ 234 - 6\ 957 =$ | e) $5\ 376 - 389 =$    |
| c) $7\ 432 - 5\ 678 =$ | f) $5\ 021 - 2\ 658 =$ |

### Imyitozo



- |                        |                        |
|------------------------|------------------------|
| a) $6\ 120 - 3\ 249 =$ | c) $8\ 105 - 5\ 258 =$ |
| b) $7\ 432 - 4\ 567 =$ | d) $9\ 043 - 6\ 398 =$ |

## 3.9 Amahurizo yo gukuramo imibare itarenze 10 000

### Urugero

Intara yacu yateguye amarushanwa yo kwandika imivugo hitabira abanyeshuri 9 768. Niba harasezerewe 8 989 mu majonjora, shaka umubare w'abashoboye gukomeza amarushanwa.

| Ibyo mfite                   | Ibyo mbazwa            | Inzira n'igisubizo                                                                                                                                  |
|------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Abanyeshuri bose<br>ni 9 768 | Abakomeje<br>irushanwa | Abakomeje irushanwa<br>ni $9\,768 - 8\,989$<br>$= 779$                                                                                              |
| Abasezerewe ni<br>8 989      |                        | $  \begin{array}{r}  8\,16\,15\,18 \\  \cancel{9}\,\cancel{7}\,\cancel{6}\,8 \\  - \quad 8\,9\,8\,9 \\  \hline  \cancel{0}\,7\,7\,9  \end{array}  $ |



### Nsuzuma ngusuzume

- 1) Mu nkambi y'impunzi irimo impunzi 9 732. Muri zo 7 986 zahawe imfashanyo n'abagiraneza. Shaka umubare w'impunzi zitabonye imfashanyo.
- 2) Mu ishuri rikuru ry'u Rwanda higa abanyeshuri 9 321. Muri bo 5 867 biga mu ishami rya siyansi. Shaka umubare w'abanyeshuri batiga siyansi.
- 3) Akagari gatuwe n'ingo 6 830. Muri zo 5 987 zabonye inzitiramibu. Shaka umubare w'ingo zitabonye inzitiramibu.

### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ririmo gukuramo imibare ukora ibi bikurikira:

1. Kuvana mu ihurizo ibyo baguhaye
2. Kuvana mu ihurizo ibyo bakubaza
3. Kwandika umubare munini wahawe mu ihurizo ukawuvanamo umubare muto, ukandika ikinyuranyo.



### Reka nisuzume

- 1) Gisa yasaruye amashu 7 120, agurisha 6 987 muri yo. Yasigaranye amashu angahe?

- 2) Umwaka ushize mu murenge wacu habarurirwaga abana 9 123. Muri bo 879 ntabwo bakingiwe inkingo zose. Shaka umubare w'abana bakingiwe inkingo zose.
- 3) Abantu 7 345 biyamamariye kuba abagenzuzi mu Karere, 789 muri bo baratorwa. Shaka umubare w'abataratowe.
- 4) Mu ngemwe z'ibiti 9 351 zatewe mu murenge wacu umwaka ushize hameze ingemwe 7 984 gusa. Shaka umubare w'ingemwe zitameze.

### Imyitozo



Soma neza imbonerahamwe ikurikira maze ukore neza ibyo wabajijwe:

|   | 1     | 2     | 3     |
|---|-------|-------|-------|
| A | 5 674 | 6 987 | 7 486 |
| B | 3 789 | 2 678 | 1 947 |
| C | 4 098 | 1 979 | 1 287 |

- 1) Shaka igiteranyo k'imibare ikurikira:
  - a)  $A_1 + B_1 =$
  - b)  $A_1 + C_1 =$
  - c)  $A_2 + B_2 =$
  - d)  $A_2 + C_2 =$
  - e)  $A_3 + B_3 =$
  - f)  $A_3 + C_3 =$
- 2) Shaka ikinyuranyo k'imibare ikurikira
  - a)  $A_1 - B_1 =$
  - b)  $A_1 - C_1 =$
  - c)  $C_1 - B_1 =$
  - d)  $A_2 - B_2 =$
  - e)  $A_2 - C_2 =$
  - f)  $B_2 - C_2 =$

### 3.10 Ikuba ry'umubare w'imibarwa 3 n'undi w'imibarwa 2 igikubo kitarenze 10 000

#### Igikorwa

Mukore imyitozo ikurikira mukurikije urugero mwahawe.

Urugero:  $325 \times 29 = 9\,425$

| Ibinyagihumbi | Ibinyajana | Ibinyacumi | Ibinyabumwe |
|---------------|------------|------------|-------------|
|               | 3          | 2          | 5           |
| 1             | ×          | 2          | 9           |
| 2             | 9          | 2          | 5           |
| + 6           | 5          | 0          |             |
| 9             | 4          | 2          | 5           |

Ndakubisha 9

- $9 \times 5 = 45$  nandika 5 nkabika 4
- $9 \times 2 = 18$  nongeraho 2 nabitse bikaba 22 nkandika 2 nkabika 2
- $9 \times 3 = 27$  nkongeraho 2 nabitse bikaba 29 nkandika 9 mu binyajana na 2 mu binyagihumbi.

Ndakubisha 2

- $2 \times 5 = 10$  nandike 0 mu binyacumi mbike 1
- $2 \times 2 = 4$  nkongeraho 1 nabitse bikaba 5
- $2 \times 3 = 6$  Ndateranya ibikubo byombi  $2\,925 + 650 = 9\,425$

- a)  $\begin{array}{r} 295 \\ \times 15 \\ \hline \end{array}$     b)  $\begin{array}{r} 198 \\ \times 19 \\ \hline \end{array}$     c)  $\begin{array}{r} 356 \\ \times 12 \\ \hline \end{array}$     d)  $\begin{array}{r} 139 \\ \times 34 \\ \hline \end{array}$     e)  $\begin{array}{r} 108 \\ \times 45 \\ \hline \end{array}$
- f)  $\begin{array}{r} 265 \\ \times 35 \\ \hline \end{array}$     g)  $\begin{array}{r} 425 \\ \times 16 \\ \hline \end{array}$     h)  $\begin{array}{r} 444 \\ \times 22 \\ \hline \end{array}$     i)  $\begin{array}{r} 502 \\ \times 22 \\ \hline \end{array}$     j)  $\begin{array}{r} 636 \\ \times 13 \\ \hline \end{array}$

### Nsobanukiwe ko:

Iyo ukuba umubare w'imibarwa 3 n'undi w'imibarwa 2 ukora ibi bikurikira:

1. Kwandika imibare mu mbonerahamwe y'ibara
2. Gukubisha ikinyabumwe kugeza urangije imibarwa yose
3. Gukubisha ikinyacumi kugeza urangije imibarwa yose  
Ukandika igikubo uhereye mu mwanya w'ibinyacumi ugana ibumoso.
4. Guteranya ibikubo byose.



### Nsuzuma ngusuzume

Ifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $\times$  na  $=$

|    |       |       |       |       |       |       |       |
|----|-------|-------|-------|-------|-------|-------|-------|
| A) | 378   | 529   | 638   | 439   | 297   | 907   | 412   |
| B) | 25    | 18    | 15    | 21    | 29    | 11    | 24    |
| C) | 9 977 | 9 219 | 9 888 | 9 450 | 8 613 | 9 522 | 9 570 |

- Ufate ikarita imwe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cyo  $\times$
- Ukurikizeho ikarita yo muri B iteganye n'iyi wafashe muri A
- Ukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Uhitamo igisubizo mu makarita yo muri C



### Reka nisuzume

Shaka igikubo k'iyi mibare

|    |             |    |             |    |             |    |             |    |             |
|----|-------------|----|-------------|----|-------------|----|-------------|----|-------------|
| a) | 789         | b) | 697         | c) | 874         | d) | 527         | e) | 472         |
|    | $\times 12$ |    | $\times 13$ |    | $\times 11$ |    | $\times 15$ |    | $\times 16$ |

## Imyitozo



Soma imbonerahamwe, ukore neza ibyo wabajijwe.

|   | 1   | 2   | 3   |
|---|-----|-----|-----|
| A | 567 | 356 | 489 |
| B | 17  | 28  | 15  |
| C | 19  | 16  | 25  |

Shaka igikubo k'imibare ikurikira

- a)  $A 1 \times B 1 =$       c)  $A 2 \times B 2 =$       e)  $A 3 \times B 3 =$   
 b)  $A 1 \times B 3 =$       d)  $A 2 \times C 2 =$       f)  $B 2 \times C 3 =$

### 3.11 Amahurizo yo gukuba umubare w'imibarwa 3 n'undi w'imibarwa 2 igikubo kitarenze 10 000

#### Urugero

Umurima w'ikawa urimo imirongo 357 kandi kuri buri murongo hariho ibiti 28. Shaka umubare w'ibiti by'ikawa biteye muri uwo murima.

| Ibyo mfite                                                    | Ibyo mbazwa                                     | Inzira n'igisubizo                                                                                                                                                         |
|---------------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imirongo y'ikawa ni 357<br>Ibiti biri kuri buri murongo ni 28 | Umubare w'ibiti bya kawa biteye muri uwo murima | Umubare w'ibiti bya kawa biteye muri uwo murima:<br>$357 \times 28 = 9\,996$<br>$\begin{array}{r} 357 \\ \times 28 \\ \hline 2\,856 \\ + 714 \\ \hline 9\,996 \end{array}$ |



#### Nsuzuma ngusuzume

- 1) Leta y'u Rwanda yoroje inka abaturage bo mu mirenge 416. Ubwo Leta y'u Rwanda yatanze inka zingahe niba buri Murenge warahawe inka 23?

- 2) Mu cyumba k'inama k'Intara harimo intebe 798 kandi kuri buri ntebe hicara abantu 12. Muri icyo cyumba hajyamo abantu bangahe?
- 3) Shaka umubare w'abanyeshuri bashyizwe mu bigo 29 niba muri buri kigo harashyizwemo abanyeshuri 287.
- 4) Ishyirahamwe ryorora inkoko rifite inkoko 479 kandi buri nkoko ituraga imishwi 18 buri mwaka. Ryunguka imishwi ingahe buri mwaka?

#### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ririmo gukuba imibare ukora ibi bikurikira:

1. Kuvana ibyo nahawe mu ihurizo
2. Kuvana mu ihurizo ibyo mbazwa
3. Kwandika imibare wahawe mu ihurizo buhagazi ukayikuba hanyuma ukandika igikubo ari cyo gisubizo.



#### Reka nisuzume

- 1) Ishyirahamwe rifite inkoko 278. Iryo shyirahamwe ribona amagi angahe niba buri nkoko itera amagi 29 buri kwezi?
- 2) Shaka umubare w'amakarito y'amazi akorwa n'uruganda mu minsi 27 niba urwo ruganda rukora amakarito 367 buri minsi.
- 3) Uwamahoro yahinze amashu ku mirongo 549. Shaka umubare w'amashu yahinze niba kuri buri murongo yarahateye amashu 18.
- 4) Mu isoko rya Kimironko harimo ameza yo gucururizaho 589. Shaka umubare w'abacuruzi bacururiza muri iryo soko niba kuri buri meza hacururizaho abacuruzi 15.



### 3.12 Ikuba ry'imibare na 100 na 1 000 igikubo kitarenze 10 000

#### Igikorwa cya 1

Itegereze ingero usobanure ibyakozwe.

#### Urugero

1)  $75 \times 100 = 7\,500$

2)  $5 \times 1\,000 = 5\,000$

#### Igikorwa cya 2

Mukube iyi mibare.

1)  $8 \times 1\,000 =$

3)  $67 \times 100 =$

2)  $9 \times 1\,000 =$

4)  $5 \times 1\,000 =$

#### Igikorwa cya 3

- Muhagarare imbere y'utudobo tubiri: Kamwe karimo amakarita y'imibare itandukanye.
- Akandi karimo amakarita yanditseho ibikubo 10 bitandukanye.
- Buri wese age agenda akure umubare mu kadobo ka mbere maze mugenzi we ashake igikubo cyawo na 100 cyangwa na 1 000 mu kadobo ka kabiri.

#### Nsobanukiwe ko:

- Iyo ukuba umubare na 100 wandika uwo mubare ukongeraho amazeru abiri (00)
- Iyo ukuba umubare na 1 000 wandika uwo mubare ukongeraho amazeru atatu (000)



#### Reka nisuzume

Murushanwe gushaka byihuse igikubo k'iyi mibare:

a)  $99 \times 100 =$

d)  $78 \times 100 =$

b)  $7 \times 1\,000 =$

e)  $57 \times 100 =$

c)  $6 \times 1\,000 =$

f)  $9 \times 1\,000 =$

## Imyitozo



Uzurisha 100 cyangwa 1 000

a)  $\square \times 3 = 3\,000$

b)  $69 \times \square = 6\,900$

c)  $8 \times \square = 8\,000$

d)  $87 \times \square = 8\,700$

e)  $\square \times 7 = 7\,000$

f)  $76 \times \square = 7\,600$

g)  $6 \times \square = 6\,000$

h)  $5 \times \square = 5\,000$

## 3.13 Igabanya ridasagura ry'umubare w'imibarwa 4 n'umubare w'umubarwa 1

### Igikorwa

Gabanya imibare ikurikira ukurikije urugero wahawe:

### Urugero

a)  $9\,819 : 9 = 1\,091$

$$\begin{array}{r}
 9819 \quad 9 \\
 - 9 \phantom{000} \\
 \hline
 08 \phantom{00} \\
 - 0 \phantom{00} \\
 \hline
 81 \phantom{00} \\
 - 81 \phantom{00} \\
 \hline
 00 \phantom{00} \\
 - 0 \phantom{00} \\
 \hline
 9 \phantom{00} \\
 - 9 \phantom{00} \\
 \hline
 0
 \end{array}$$

1091

b)  $8\,712 : 8 = 1\,089$

$$\begin{array}{r}
 8712 \quad 8 \\
 - 8 \phantom{000} \\
 \hline
 07 \phantom{00} \\
 - 0 \phantom{00} \\
 \hline
 71 \phantom{00} \\
 - 64 \phantom{00} \\
 \hline
 072 \phantom{00} \\
 - 72 \phantom{00} \\
 \hline
 00
 \end{array}$$

1089

1)  $7\,496 : 8 =$

2)  $6\,327 : 9 =$

3)  $7\,049 : 7 =$

### Nsobanukiwe ko:

Iyo ugabanya imibare ukora ibi bikurikira:

1. Kwandika ikigabanywa n'ikigabanya mu mahembe
2. Guhera ku binyagihumbi ugabanya, ugakurikizaho ibinyajana, ibinyacumi, ugaheruka ibinyabumwe.
3. Iyo ibinyagihumbi ari bike ku kigabanya ufatira hamwe ibinyagihumbi n'ibinyajana.
4. Iyo umubare ukurikiyeho ari muto ku kigabanya ushyira zero (0) mu kigabanyo ugakuramo hanyuma ukamanura ibinyabumwe.



### Nsuzuma ngusuzume

Mwifashishe amakarita yanditseho imibare n'andi ariho ibimenyetso byo  $:$  na  $=$

- A) 

|       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|
| 8 984 | 6 576 | 8 952 | 8 172 | 7 985 | 8 491 | 9 879 |
|-------|-------|-------|-------|-------|-------|-------|
- B) 

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 8 | 4 | 6 | 9 | 5 | 7 | 3 |
|---|---|---|---|---|---|---|
- C) 

|     |       |       |       |       |       |       |
|-----|-------|-------|-------|-------|-------|-------|
| 908 | 1 213 | 1 597 | 1 492 | 1 644 | 3 293 | 1 123 |
|-----|-------|-------|-------|-------|-------|-------|

- Mufate ikarita imwe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cyo  $:$
- Mukurikizeho iyo muri B iteganye n'iyo wafashe muri A
- Mukurikizeho ikarita yanditseho ikimenyetso cya  $=$
- Muhitemo igisubizo mu makarita yo muri C



### Reka nisuzume

Shaka ibigabanyo by'imibare ikurikira:

- a)  $9\,549 : 9 =$       c)  $7\,952 : 7 =$       e)  $6\,585 : 5 =$   
b)  $8\,728 : 8 =$       d)  $6\,906 : 6 =$       f)  $8\,976 : 4 =$

## Imyitozo



Soma neza imbonerahamwe, ushake ibigabanyo wabajijwe.

|   | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| A | 9 878 | 7 839 | 5 692 | 8 965 | 7 656 | 6 398 | 7 296 | 9 963 |
| B | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     |

- a) A 1 na B 1                      c) A 3 na B 3                      e) A 5 na B 5  
b) A 2 na B 2                      d) A 4 na B 4                      f) A 6 na B 6

### 3.14 Amahurizo yo kugabanya

#### Urugero:

Gabanya ku buryo bungana ibitabo 9 872 ibigo by'amashuri 8. Buri kigo kizahabwa ibitabo bingahe?

| Ibyo mfite                                                           | Ibyo mbazwa                           | Inzira n'igisubizo                                             |
|----------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------|
| Umubare w'ibitabo byose ni 9 872<br>Umubare w'ibigo by'amashuri ni 8 | Umubare w'ibitabo buri kigo kizahabwa | Umubare w'ibitabo buri kigo kizahabwa ni $9\,872 : 8 = 1\,234$ |



#### Nsuzuma ngusuzume

- 1) Uturere 7 twagabiwe n'umuryango nterankunga inka 9 891. Buri karere kagabiwe inka zingahe niba twarazigabanye ku buryo bungana?
- 2) Komisiyo y'amatora yagabanyije ku buryo bungana impapuro z'itora 7 992 ibiro by'itora 8. Buri biro by'itora byahawe impapuro z'itora zingahe?
- 3) Shyira amakayi 5 490 mu bikarito 9 ku buryo ibikarito byose bijyamo umubare ungana w'ibitabo. Buri gikarito uzagishyiramo amakayi angahe?

- 4) Kaneza yabumbye amatafari 9 896 ashaka kubakisha inzu 4 zingana. Shaka umubare w'amatafari azajya kuri buri nzu.

### Nsobanukiwe ko:

Iyo ukora ihurizo ririmo kugabanya imibare ukora ibi:

1. Kuvana mu ihurizo ibyo baguhaye
2. Kuvana mu ihurizo ibyo bakubaza
3. Kwandika imibare wahawe mu ihurizo mu mahembe maze ukayigabanya hanyuma ukandika ikigabanyo.



### Reka nisuzume

- 1) Ihogoza yasaruye inanasi 5 496 bazipakira imodoka 8 ku buryo bungana. Buri modoka yatwaye inanasi zingahe?
- 2) Abanyeshuri 7 895 basoje ikiciro rusange bagize amanota meza boherejwe ku buryo bungana mu bigo by'amashuri 5. Buri kigo cyoherejwemo abanyeshuri bangahe?
- 3) Saranganya ku buryo bungana imifuka 8 793 y'ifumbire mvaruganda mu turere 9. Buri karere kazahabwa imifuka ingahe?
- 4) Gabanya ku buryo bungana mudasobwa 6 797, uturere 7. Shaka umubare wa mudasobwa buri karere kazahabwa.

### Imyitozo



- 1) Kagabo yacuruje amacupa 8 750 y'amavuta mu minsi 5. Buri muni yacuruzaga amacupa angahe?
- 2) Saranganya ku buryo bungana ingemwe z'imbuta 9 400 mu midugudu 4. Buri mudugudu uzabona ingemwe zingahe?

### 3.15 Isuzuma risoza umutwe wa 3

- 1) Andika 9 678 mu magambo
- 2) Shaka umubare wasesenguwe
  - a) b 8 c 9 h 7 j 6 =
  - b) b 5 h 8 c 4 j 3 =
- 3) Tahura imibare yasesenguwe:  $5\,000 + 900 + 60 + 8 =$
- 4) Vuga umwanya w'imibara wa icyeho akarongo
  - a) 8 759
  - b) 7 645
  - c) 6 975
  - d) 9 542
- 5) Gereranya ukoresheje  $<$ ,  $>$  na  $=$ 
  - a) 8 189  8 819
  - c) 7 689  7 689
  - b) 6 583  6 538
  - d) 9 587  9 578
- 6) Tondeka iyi mibare uhagaze ku muto uya ku munini  
7 365, 7 356, 5 746, 4 784, 8 497, 6 479
- 7) Tondeka uhagaze ku munini uya ku muto  
5 708, 6 718, 4 738, 9 786, 6 827, 8 710
- 8) Shaka igiteranyo k'imibare ikurikira:
  - a)  $6\,574 + 2\,695 =$
  - b)  $7\,865 + 1\,879 =$
- 9) Shaka ikinyuranyo k'imibare ikurikira:
  - a)  $7\,856 - 5\,976 =$
  - b)  $8\,761 - 6\,819 =$
- 10) Shaka igikubo k'imibare ikurikira
  - a) 198
  - b) 265
  - c) 349
  - d) 573
  - e) 497

$\times 49$

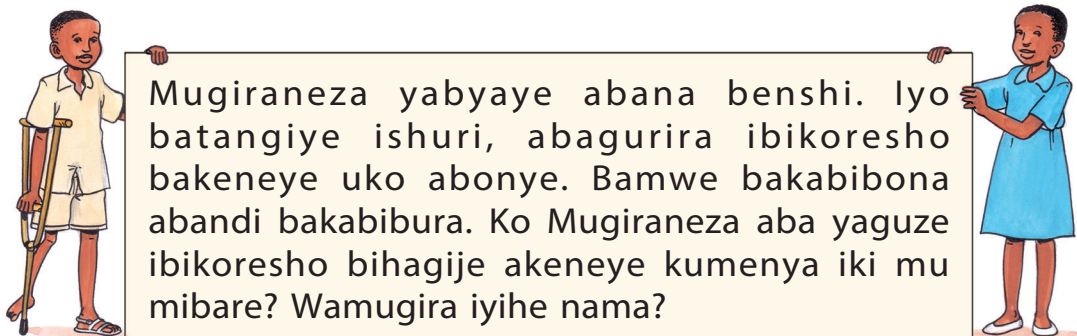
$\times 37$

$\times 28$

$\times 16$

$\times 17$
- 11) Shaka ikigabanyo k'imibare ikurikira
  - a)  $7\,985 : 5 =$
  - b)  $8\,526 : 6 =$
- 12) Kaneza yaranguye imifuka 8 759 agurishaho 5 784. Yasigaranye imifuka ingahe?
- 13) Mu isomero ry'ishuri ryacu harimo ibitabo 968 by'imibare. Niba abanyeshuri baratiye ibitabo 378 ubwo mu isomero hasigayemo ibitabo bingahe?
- 14) Niba ikamyo imwe itwara imifuka ya sima 300, ubwo amakamyo 24 yatwara imifuka ingahe ya sima?
- 15) Gabanyiriza ku buryo bungana imyembe 981 mu bitebo 9. Buri gitebo kizajyamo imyembe ingahe?

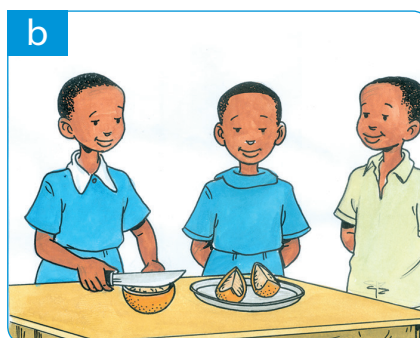
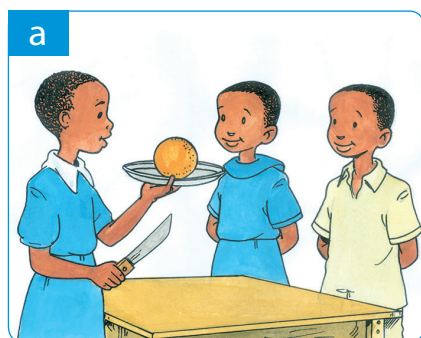
# Imigabane ifite ikita kitarenze 10



## 4.1 Gusoma no kwandika imigabane itarenze ikizima kandi ikita kitarenze 10

### Igikorwa cya 1

Mwitegereze ibyakozwe ku ishusho, mubiganireho, mubyandike.



### Nsobanukiwe ko:

- Umugabane ari igice k'ikizima kimwe.
- Buri mugabane uba ugizwe n'ibice bibiri: ikita n'ikibara.

### Urugero:

$\frac{1}{2} \rightarrow$  Ikibara  $\rightarrow$  Umurongo w'umugabane  
 $\frac{2}{2} \rightarrow$  Ikita

- Iyo basoma imigabane bahera ku kibara bajya ku kita.
- Ikita kivuga umubare w'ibice bihari.
- Akarongo gatambitse hagati y'ikita n'ikibara ni umurongo w'umugabane, kakavuga ugabanije na
- Ikibara kikavuga umubare w'ibice byagabanyijwe mu kizima.

### Urugero:

| Umugabane      | Amazina             | Umugabane     | Amazina             |
|----------------|---------------------|---------------|---------------------|
| $\frac{1}{2}$  | Kimwe cya kabiri    | $\frac{2}{3}$ | Bibiri bya gatatu   |
| $\frac{1}{3}$  | Kimwe cya gatatu    | $\frac{1}{7}$ | Kimwe cya karindwi  |
| $\frac{1}{4}$  | Kimwe cya kane      | $\frac{3}{4}$ | Bitatu bya kane     |
| $\frac{1}{5}$  | Kimwe cya gatanu    | $\frac{4}{5}$ | Bine bya gatanu     |
| $\frac{1}{6}$  | Kimwe cya gatandatu | $\frac{3}{7}$ | Bitatu bya karindwi |
| $\frac{1}{8}$  | Kimwe cya munani    | $\frac{4}{9}$ | Bine by'ikenda.     |
| $\frac{1}{10}$ | Kimwe cya cumi      | $\frac{5}{8}$ | Bitanu by'umunani.  |

### Igikorwa cya 2

- 1) Muhine urupapuro mo ibice bibiri bingana.
- 2) Muvuge kandi mwandike umugabane wa buri gice mu mibare no mu magambo.



- 3) Muhine urupapuro mo ibice bitatu bingana maze ibice bibiri mubisige ibara hanyuma muvuge kandi mwandike mu mibare no mu magambo umugabane w'igice gisize ibara n'uw'igice kidasize ibara.
- 4) Kuri buri mugabane mwanditse, mwerekane ikita n'ikibara.



**Nsuzuma ngusuzume**

Andika mu mibare no mu magambo imigabane isize amabara

a)



b)



c)



**Imyitozo**



- 1) Mwitgereze hanyuma mwandike umugabane uhagarariye amabara akurikira:

a) Umutuku

c) Umukara

b) Ubururu

d) Umuhondo



- 2) Mwitgereze ishusho, musubize ibibazo.



Ibibazo: Mwandike umugabane uhagarariye

- 1) Abakobwa
- 2) Abahungu
- 3) Abafite ubumuga
- 4) Abambaye amataratara
- 5) Abambaye amakabutura, imipira n'inkweto bya siporo
- 6) Abari kunywa umutobe
- 7) Abambaye amajipo n'inkweto z'umutuku
- 8) Abambaye amapantaro, inkweto z'umukara, amashati n'ingofero
- 9) Abari gukina umupira w'intoki

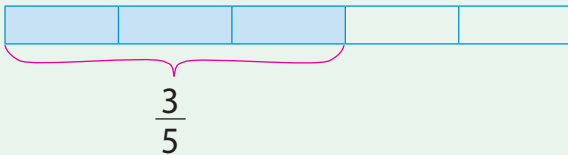
## 4.2 Gushushanya no gusiga amabara imigabane itarenze ikizima kandi ikita kitarenze 10

### Igikorwa cya 1

Itegereze urugero, usobanure ibyakoze.

**Urugero:**  $\frac{3}{5}$  by'iki gishushanyo bisize ibara.

$\frac{2}{5}$  by'iki gishushanyo ntibisize ibara.



### Igikorwa cya 2

Itegereze usobanure ibice by'ibi bishushanyo bisize amabara n'ibidasize amabara.

a)



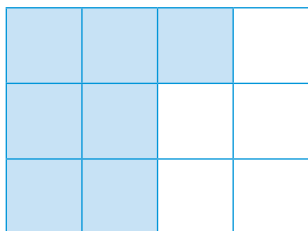
b)



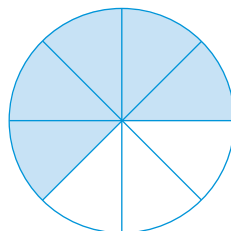
### Igikorwa cya 3

Mwandike imigabane yashushanyijwe mu mibare no mu magambo.

a)



b)



#### Nsobanukiwe ko:

- Iyo ushushanya umugabane ushyira ibara mu bice bingana n'ikibara.
- Iyo wandika umugabane washushanyijwe, umubare w'ibice birimo ibara uba ikibara.
- Umubare w'ibice byose ni ukuvuga ibirimo ibara n'ibitarimo ibara uba ari ikita.

#### Imyitozo



1) Soma, wandike mu magambo, ushushanye maze usige amabara iyi migabane:

a)  $\frac{4}{5}$

c)  $\frac{3}{8}$

e)  $\frac{6}{7}$

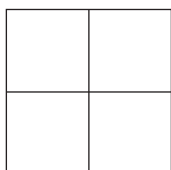
b)  $\frac{2}{3}$

d)  $\frac{7}{9}$

f)  $\frac{4}{10}$

2) Siga ibara  $\frac{3}{4}$  by'aya mashusho.

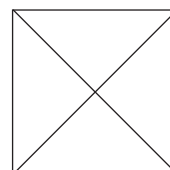
a)



b)

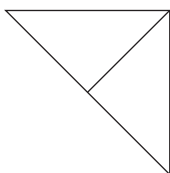


c)

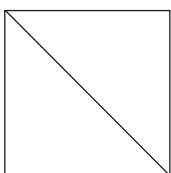


3) Siga ibara  $\frac{1}{2}$  cy'aya mashusho

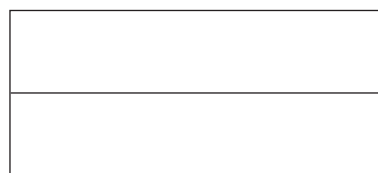
a)



b)

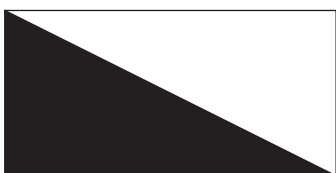


c)

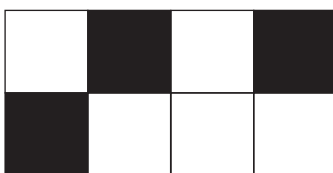


4) Andika mu mibare no mu magambo umugabane uhagarariye ahasize ibara muri buri shusho

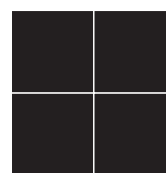
a)



b)



c)



5) Soma, wandike mu mibare, unashushanye iyi migabane:

a) Ikenda by'icumi:

d) Bitatu by'icumi:

b) Birindwi by'umunani:

e) Birindwi by'icumi:

c) Birindwi by'ikenda:

f) Bitanu by'umunani:

### 4.3 Kugereranya imigabane ihuje ikita kitarenze 10 kandi itarenze ikizima 1

#### Igikorwa

Ukurikije urugero wahawe, gereranya imigabane ikurikira.

**Urugero:**

Koresha  $>$ ,  $<$  na  $=$  ugereranye iyi migabane

a)  $\frac{1}{3} < \frac{2}{3}$

b)  $\frac{2}{4} < \frac{1}{4}$

c)  $\frac{2}{3} = \frac{2}{3}$

a)  $\frac{3}{8} \square \frac{1}{8}$

c)  $\frac{1}{2} \square \frac{1}{2}$

e)  $\frac{4}{6} \square \frac{5}{6}$

b)  $\frac{5}{9} \square \frac{2}{9}$

d)  $\frac{5}{5} \square \frac{5}{5}$

f)  $\frac{1}{4} \square \frac{4}{4}$

### Nsobanukiwe ko:

- Iyo ugereranya imigabane ihuje ikita ugereranya ibibara (imibare yo hejuru) maze ugashyiramo ikimenyetso k'igereranya gikwiye ( $<$ ,  $>$  na  $=$ ).
- Iyo ibibara n'ibyita bingana uhita umenya ko iyo migabane ingana.



### Nsuzuma ngusuzume

Mukoreshe  $<$ ,  $>$  na  $=$  mugereranye iyi migabane

a)  $\frac{1}{3}$    $\frac{2}{3}$

d)  $\frac{2}{5}$    $\frac{3}{5}$

g)  $\frac{1}{6}$    $\frac{4}{6}$

b)  $\frac{1}{4}$    $\frac{3}{4}$

e)  $\frac{4}{7}$    $\frac{1}{7}$

h)  $\frac{4}{10}$    $\frac{7}{10}$

c)  $\frac{4}{5}$    $\frac{2}{5}$

f)  $\frac{5}{6}$    $\frac{5}{6}$

i)  $\frac{7}{9}$    $\frac{8}{9}$

## 4.4 Gutondeka imigabane ihuje ikita kitarenze 10 kandi itarenga ikizima 1

A. Gutondeka imigabane ihuje ikita kitarenze 10 kandi itarenga ikizima 1; uhereye ku muto ujya ku munini

### Igikorwa cya 1

Itgereze urugero, usobanure ibyakozwe.

#### Urugero:

$$\frac{5}{6}, \frac{3}{6}, \frac{2}{6}, \frac{1}{6}, \frac{6}{6}, \frac{4}{6} \longrightarrow \frac{1}{6}, \frac{2}{6}, \frac{3}{6}, \frac{4}{6}, \frac{5}{6}, \frac{6}{6}$$

### Imyitozo



Mutondeke iyi migabane muhereye ku muto mujya ku munini.

a)  $\frac{5}{10}, \frac{3}{10}, \frac{2}{10}, \frac{1}{10}, \frac{6}{10}$

c)  $\frac{4}{10}, \frac{8}{10}, \frac{10}{10}, \frac{7}{10}, \frac{9}{10}$

b)  $\frac{2}{9}, \frac{1}{9}, \frac{6}{9}, \frac{4}{9}, \frac{5}{9}$

d)  $\frac{6}{8}, \frac{3}{8}, \frac{5}{8}, \frac{1}{8}, \frac{2}{8}$

### Nsobanukiwe ko:

Iyo utondeka imigabane ihuje ikita uhareye ku muto ujya ku munini, umugabane muto ni wo uba ufite ikibara gito. Umugabane munini ni wo uba ufite ikibara kinini.

## B. Gutondeka imigabane ihuje ikita kitarenze 10 kandi itarenga ikizima 1 uhareye ku munini ujya ku muto

### Igikorwa

Tondeka iyi migabane uhareye ku munini ujya ku muto ukurikije urugero wahawe.

### Urugero:

$$\frac{5}{7}, \frac{3}{7}, \frac{2}{7}, \frac{7}{7}, \frac{6}{7}, \frac{4}{7} \longrightarrow \frac{7}{7}, \frac{6}{7}, \frac{5}{7}, \frac{4}{7}, \frac{3}{7}, \frac{2}{7}$$

a)  $\frac{5}{6}, \frac{3}{6}, \frac{2}{6}, \frac{1}{6}, \frac{6}{6}$

c)  $\frac{2}{5}, \frac{1}{5}, \frac{3}{5}, \frac{4}{5}, \frac{5}{5}$

b)  $\frac{4}{4}, \frac{3}{4}, \frac{2}{4}, \frac{1}{4}$

d)  $\frac{3}{3}, \frac{1}{3}, \frac{2}{3}$

### Nsobanukiwe ko:

Iyo utondeka imigabane ihuje ikita uhareye ku muto ujya ku munini, umugabane munini ni wo uba ufite ikibara kinini. Umugabane muto ni wo uba ufite ikibara gito.



### Reka nisuzume

1) Tondeka uhareye ku mugabane muto ujya ku munini

a)  $\frac{3}{7}, \frac{2}{7}, \frac{7}{7}, \frac{6}{7}, \frac{4}{7}$

c)  $\frac{8}{9}, \frac{1}{9}, \frac{6}{9}, \frac{9}{9}, \frac{5}{9}$

b)  $\frac{10}{10}, \frac{2}{10}, \frac{8}{10}, \frac{6}{10}, \frac{9}{10}$

d)  $\frac{2}{5}, \frac{1}{5}, \frac{3}{5}, \frac{4}{5}, \frac{5}{5}$

2) Tondeka uhereye ku mugabane munini ujya ku muto

a)  $\frac{3}{8}, \frac{2}{8}, \frac{7}{8}, \frac{6}{8}, \frac{4}{8}$

c)  $\frac{3}{4}, \frac{1}{4}, \frac{2}{4}, \frac{4}{4}$

b)  $\frac{5}{6}, \frac{2}{6}, \frac{4}{6}, \frac{6}{6}, \frac{1}{6}$

d)  $\frac{2}{3}, \frac{1}{3}, \frac{3}{3}$

#### 4.5 Iteranya ry'imigabane ihuje ikita kitarenze 10 kandi itarenze ikizima 1

##### Igikorwa

Mushake igiteranyo k'imigabane ikurikira mukurikije urugero mwahawe.

**Urugero:** Shaka igiteranyo k'imigabane ikurikira

a)  $\frac{5}{9} + \frac{2}{9} =$

$$\frac{5}{9} + \frac{2}{9} = \frac{5+2}{9} = \frac{7}{9}$$

b)  $\frac{4}{10} + \frac{5}{10} =$

$$\frac{4}{10} + \frac{5}{10} = \frac{4+5}{10} = \frac{9}{10}$$

a)  $\frac{3}{8} + \frac{1}{8} =$

c)  $\frac{2}{7} + \frac{3}{7} =$

e)  $\frac{3}{8} + \frac{1}{8} =$

b)  $\frac{2}{9} + \frac{7}{9} =$

d)  $\frac{2}{4} + \frac{1}{4} =$

f)  $\frac{4}{10} + \frac{5}{10} =$

##### Nsobanukiwe ko:

Iyo uteranya imigabane ihuje ikita uteranya ibibara maze ukandukura ikita utagihinduye.



##### Nsuzuma ngusuzume

Shaka igiteranyo k'imigabane ikurikira:

a)  $\frac{4}{8} + \frac{2}{8} + \frac{1}{8} =$

c)  $\frac{3}{9} + \frac{1}{9} + \frac{5}{9} =$

b)  $\frac{2}{10} + \frac{5}{10} + \frac{1}{10} =$

d)  $\frac{2}{7} + \frac{1}{7} + \frac{3}{7} =$

## 4.6 Amahurizo yo guteranya imigabane ihuje ikita kitarenga 10

### Igikorwa

Kurikiza urugero wahawe, ukore aya mahurizo.

### Urugero:

Kalisa yateye ibiti kuri  $\frac{1}{8}$  cy'umurima we naho abakozi be bamuterera ahangana na  $\frac{5}{8}$ . Shaka umugabane w'umurima bose hamwe bateyeho ibiti.

| Ibyo mfite                                                      | Ibyo mbazwa                         | Izira n'igisubizo                                                                                  |
|-----------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------|
| Umugabane wawe na Kalisa ni $\frac{1}{8}$ cy'umurima.           | Umugabane w'umurima wateweho ibiti. | Umugabane w'umurima wateweho ibiti: $\frac{1}{8} + \frac{5}{8}$<br>$= \frac{1+5}{8} = \frac{6}{8}$ |
| Umugabane wawe n'abakozi ba Kalisa ni $\frac{5}{8}$ by'umurima. |                                     |                                                                                                    |



### Nsuzuma ngusuzume

- 1) Mutesi yakoze  $\frac{3}{5}$  by'umukoro avuye ku ishuri, bukeye arongera akoraho  $\frac{1}{5}$ . Shaka umugabane w'imyitoto amaze gukora.
- 2)  $\frac{3}{10}$  by'inka za Mutunzi zirakamwa. Mu minsi ishize yongeyemo izindi mbyeyi zingana na  $\frac{6}{10}$ . Shaka umugabane w'inka zose zikamwa.
- 3) Ishyirahamwe ryasaruye  $\frac{2}{6}$  by'umurima w'amashu ku wa gatatu naho ku wa kane ryongera gusarura  $\frac{3}{6}$ . Shaka umugabane w'ahamaze gusarurwa.



- 4) Umucuruzi yacuruje  $\frac{2}{10}$  by'umufuka w'isukari n'umukiriya umwe haje undi atwara  $\frac{7}{10}$ . Yacuruje isukari ingana n'uwuhe mugabane?

**Nsobanukiwe ko:**

Iyo ugiye gukora ihurizo ririmo guteranya imigabane ihuje ikita, ukora ibi bikurikira:

- Werekana ibyo baguhaye
- Werekana ibyo bakubaza
- Wandika imigabane wahawe mu ihurizo maze ukandukura ikita ugateranya ibibara.



**Reka nisuzume**

- 1) Umuboshyi yaboshye  $\frac{2}{7}$  by'agaseke ku wa mbere, ku wa kabiri aboha  $\frac{3}{7}$ , naho ku wa gatatu aboha  $\frac{1}{7}$ . Ubwo amaze kuboha umugabane ungana iki muri iyo minsi itatu?
- 2) Uwera yahaye abana  $\frac{5}{10}$  by'umugati mu gitondo naho nimugoroba abaha  $\frac{3}{10}$  byawo. Ubwo bamaze kurya umugati ungana n'uwuhe mugabane?
- 3) Abanyeshuri bo mu mwaka wa gatatu basukuye  $\frac{4}{9}$  by'ubusitani bw'ishuri ryacu, naho abo mu mwaka wa kane basukura  $\frac{2}{9}$  by'ubusitani.  
Bose hamwe basukuye umugabane ungana ute?
- 4) Umukerarugendo yagenze  $\frac{3}{8}$  by'urugendo rwe mbere ya saa sita naho nyuma ya saa sita agenda  $\frac{4}{8}$ . Ubwo amaze kugenda umugabane ungana iki w'urugendo rwe?

## 4.7 Ikuramo ry'imigabane ihuje ikita kitarenze 10 kandi itarenze ikizima 1

### Igikorwa cya 1

Shaka ikinyuranyo k'imigabane ukurikije urugero wahawe.

### Urugero

$$\text{a) } \frac{8}{10} - \frac{6}{10} =$$

$$\frac{8}{10} - \frac{6}{10} = \frac{8-6}{10} = \frac{2}{10}$$

$$\text{b) } \frac{8}{9} - \frac{3}{9} =$$

$$\frac{8}{9} - \frac{3}{9} = \frac{8-3}{9} = \frac{5}{9}$$

$$\text{a) } \frac{7}{9} - \frac{4}{9} =$$

$$\text{c) } \frac{5}{6} - \frac{4}{6} =$$

$$\text{e) } \frac{4}{5} - \frac{2}{5} =$$

$$\text{b) } \frac{8}{9} - \frac{7}{9} =$$

$$\text{d) } \frac{5}{8} - \frac{4}{8} =$$

$$\text{f) } \frac{10}{10} - \frac{8}{10} =$$

### Nsobanukiwe ko:

Iyo ukuramo imigabane ihuje ikita ukuramo ibibara maze ukandukura ikita utagihinduye.



### Reka nisuzume

$$\text{a) } \frac{9}{10} - \frac{4}{10} - \frac{3}{10} =$$

$$\text{c) } \frac{7}{9} - \frac{2}{9} - \frac{3}{9} =$$

$$\text{b) } \frac{8}{8} - \frac{1}{8} - \frac{6}{8} =$$

$$\text{d) } \frac{6}{7} - \frac{3}{7} - \frac{2}{7} =$$

## 4.8 Amahurizo yo gukuramo imigabane ihuje ikita kitarenga 10

### Urugero:

$\frac{3}{4}$  by'inka za Gisa ni inyana. Shaka umugabane w'inyana yasigaranye niba yaragabiye mubyara we  $\frac{1}{4}$  k'inyana ze.

| Ibyo mfite                                              | Ibyo mbazwa                    | Inzira n'igisubizo                                            |
|---------------------------------------------------------|--------------------------------|---------------------------------------------------------------|
| Umugabane w'inyana zose ni $\frac{3}{4}$                | Umugabane w'inyana yasigaranye | Umugabane w'inyana yasigaranye ni $\frac{3}{4} - \frac{1}{4}$ |
| Umugabane w'inyana yagabiye mubyara we ni $\frac{1}{4}$ |                                | $= \frac{3-1}{4} = \frac{2}{4}$                               |



### Nsuzuma ngusuzume

- 1) Mutoni afite  $\frac{9}{10}$  by'igisheke, yariyeho  $\frac{3}{10}$ . Shaka umugabane w'igisheke asigaranye.
- 2) Karabo afite  $\frac{8}{9}$  by'umurima, yagurishijeho Gahima  $\frac{4}{9}$ . Shaka umugabane w'umurima yasigaranye.
- 3) Mwarimu wacu afite  $\frac{9}{10}$  by'ingwa. Niyandikishaho  $\frac{3}{10}$  uyu muni arasigarana ingwa zingana n'uwuhe mugabane?

### Nsobanukiwe ko:

Iyo ukora ihurizo ririmo gukuramo imigabane ukora ibi:

1. Ugaragaza ibyo baguhaye mu ihurizo
2. Ugaragaza ibyo bakubaza mu ihurizo
3. Kwandika imigabane wahawe mu ihurizo maze ukandukura ikita ugakuramo ibibara.



### Reka nisuzume

- 1) Data yateye  $\frac{6}{7}$  by'ibiti mu murima hamera  $\frac{3}{7}$  gusa. Shaka umugabane ungana n'ibiti bitameze.
- 2) Butera afite  $\frac{4}{5}$  by'akawunga. Nacuruzaho  $\frac{3}{5}$  azasigarana akawunga kangana n'uwuhe mugabane?
- 3) Kariza yameshe  $\frac{7}{8}$  by'imyenda ye. Huma imyenda ingana na  $\frac{5}{8}$ . Shaka umugabane ungana n'imyenda itaruma.

## 4.9 Gushaka icyuzuzo cy'umugabane kugira ngo haboneke ikizima 1

### Igikorwa cya 1

Itegereze urugero, usobanure ibyakozwe.

**Urugero:** Shaka icyuzuzo cy'umugabane  $\frac{5}{9}$  kugira ngo ubone ikizima kimwe.

$$\frac{5}{9} + \square = \frac{9}{9} \rightarrow \frac{9}{9} - \frac{5}{9} = \frac{9-5}{9} = \frac{4}{9}$$

Icyuzuzo cya  $\frac{5}{9}$  ni  $\frac{4}{9}$

Igiteranyo cyabyo ( $\frac{9}{9}$ ) ni ikizima kimwe.

### Igikorwa cya 2

Mushake icyuzuzo k'iyi migabane kugira ngo mubone ikizima kimwe

- |                  |                  |                  |                  |                   |                   |
|------------------|------------------|------------------|------------------|-------------------|-------------------|
| a) $\frac{4}{7}$ | c) $\frac{3}{5}$ | e) $\frac{2}{6}$ | g) $\frac{1}{6}$ | i) $\frac{2}{10}$ | k) $\frac{7}{10}$ |
| b) $\frac{6}{9}$ | d) $\frac{5}{8}$ | f) $\frac{3}{5}$ | h) $\frac{4}{5}$ | j) $\frac{2}{3}$  | l) $\frac{7}{9}$  |

### Nsobanukiwe ko:

Iyo ushaka icyuzuzo cy'umugabane ureba ikita cy'umugabane baguhaye, ukakifashisha ukora ikizima, maze ugakuramo umugabane baguhaye.



### Nsuzuma ngusuzume

Uzuza ukore umugabane ukwiye.

a)  $\frac{\square}{7} + \frac{3}{7} = \frac{7}{7}$

c)  $\frac{6}{8} + \frac{\square}{8} = \frac{8}{8}$

b)  $\frac{4}{9} + \frac{\square}{9} = \frac{9}{9}$

d)  $\frac{\square}{10} + \frac{1}{10} = \frac{10}{10}$

## 4.10 Umugabane w'umubare ushyitse

### Igikorwa

Itegereze urugero wahawe, ushake imigabane ikurikira:

### Urugero:

a)  $\frac{1}{2}$  cya 16 =

$$\frac{1}{2} \text{ cya } 16 = \frac{1 \times 16}{2} \\ = \frac{16}{2} = 8$$

b)  $\frac{2}{3}$  bya 9 =

$$\frac{2}{3} \text{ bya } 9 = \frac{2 \times 9}{3} \\ = \frac{18}{3} = 6$$

a)  $\frac{2}{3}$  bya 45 =

c)  $\frac{3}{7}$  bya 14 =

e)  $\frac{3}{10}$  bya 70 =

b)  $\frac{4}{5}$  bya 15 =

d)  $\frac{5}{8}$  bya 40 =

f)  $\frac{4}{7}$  bya 35 =

### Nsobanukiwe ko:

Iyo ushaka agaciro k'umugabane w'umubare ushyitse ufata uwo mubare ukawukuba n'ikibara. Igikubo ubonye ukakigabanya n'ikita.



### Reka nisuzume



Itegereze amashusho maze uvuge kandi wandike umubare w'ibintu wabajijwe.

|                                                                                     |                                      |
|-------------------------------------------------------------------------------------|--------------------------------------|
|  | $\frac{1}{2}$ cy'aya macunga ni ____ |
|  | $\frac{5}{6}$ by'izi nyanya ni ____  |
|  | $\frac{3}{7}$ by'izi pome ni ____    |

|                                                                                   |                                       |
|-----------------------------------------------------------------------------------|---------------------------------------|
|  | $\frac{7}{8}$ by'aya majagi ni ____   |
|  | $\frac{5}{9}$ by'aya mapapayi ni ____ |
|  | $\frac{7}{10}$ by'aya mashu ni ____   |



### Nsuzuma ngusuzume

Shaka agaciro k'umugabane w'imibare ishyitse ikurikira:

- a)  $\frac{1}{8}$  cya 64 =      c)  $\frac{7}{10}$  bya 50 =      e)  $\frac{9}{10}$  bya 30 =  
b)  $\frac{5}{9}$  bya 54 =      d)  $\frac{1}{10}$  cya 70 =      f)  $\frac{7}{8}$  bya 56 =

## 4.11 Amahurizo ku mugabane w'umubare ushyitse

### Urugero

Uwase afite inka 60, ashaka kugurishaho  $\frac{3}{4}$  byazo.

- a) Azagurisha inka zingahe?  
b) Azasigarana inka zingahe?

| Ibyo mfite                                   | Ibyo mbazwa                | Inzira n'igisubizo                                                                                                                                                      |
|----------------------------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Umubare w'inka zose ni 60                    | Umubare w'inka azagurisha  | Umubare w'inka azagurisha:<br>$\frac{3}{4}$ bya 60 ni $\frac{60 \times 3}{4} = 45$                                                                                      |
| Umugabane w'inka azagurisha ni $\frac{3}{4}$ | Umubare w'inka azasigarana | Umugabane w'inka azasigarana ni $\frac{4}{4} - \frac{3}{4} = \frac{1}{4}$<br>Umubare w'inka azasigarana ni $\frac{1}{4}$ cya 60<br>ni $\frac{60 \times 1}{4} =$ Inka 15 |



### Nsuzuma ngusuzume

- 1) Muhongerwa afite insina 200,  $\frac{4}{5}$  byazo byarannye. Shaka umubare w'insina zannye n'uw'izitarana
- 2) Mu bubiko harimo imifuka 120 ya sima. Nibubakisha  $\frac{5}{8}$  byayo bazaba bakoresheje imifuka ingahe? Mu bubiko hazasigara isima ingana iki?
- 3) Mu cyumba k'inama harimo abantu 125.  $\frac{2}{5}$  byabo bafite mudasobwa. Shaka umubare w'abantu bafite mudasobwa n'uw'abatazifite.

### Nsobanukiwe ko:

Iyo ugiye gukora ihurizo ririmo kugabanya imibare:

1. Werekana ibyo baguhaye mu ihurizo.
2. Werekana ibyo bakubaza mu ihurizo.
3. Wandika umugabane n'umubare wahawe mu ihurizo maze ugakuba ikibara n'umubare ushyitse hanyuma igikubo ubonye ukakigabanya n'ikita.



### Reka nisuzume

- 1) Mu mudugudu wacu hubatse inzu 240.  $\frac{5}{6}$  byazo bisakajwe amabati. Shaka umubare w'inzu zisakajwe amabati n'izidashakaje amabati.
- 2) Mu ishuri harimo abanyeshuri 45.  $\frac{2}{3}$  byabo ni abahungu. Shaka umubare w'abahungu n'uw'abakobwa baryigamo.
- 3) Mu kigo gitwara abagenzi harimo imodoka 84.  $\frac{4}{7}$  byazo zikorera mu Ntara. Ubwo mu Ntara hakorera imodoka zingahe?

## 4.12 Akamaro k'imigabane

### Igikorwa cya 1

Mwitegereze buri shusho, musobanure ibiri gukorwa.



### Nsobanukiwe ko:

- Iyo abantu bagabana ibintu bitandukanye bakoresha imigabane.
- Abantu bashobora kugabana ibintu ku buryo bungana.
- Abantu bashobora kugabana ibintu ku buryo butangana.

### Igikorwa cya 2

Buri wese abwire abandi ibyo iwabo bagabana.

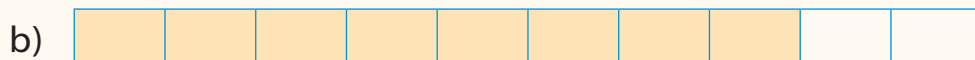
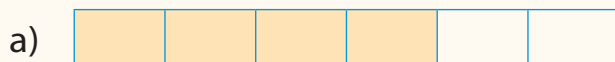
### Igikorwa cya 3

Muganire ku kamaro k'imigabane mutanga ingero z'aho ikoreshwa.



### 4.13 Isuzuma risoza umutwe wa 4

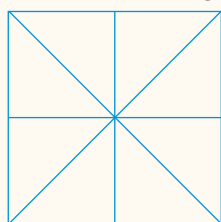
- 1) Andika mu mibare no mu magambo imigabane isize ibara



- 2) Shushanya maze usige ibara imigabane ikurikira :

a)  $\frac{5}{8}$     b)  $\frac{2}{5}$     c)  $\frac{4}{6}$     d)  $\frac{3}{7}$     e)  $\frac{4}{9}$

- 3) Siga ibara  $\frac{5}{8}$  by'iyi shusho



- 4) Gereranya ukoresheje  $<$ ,  $>$  na  $=$

a)  $\frac{5}{7}$    $\frac{6}{7}$     c)  $\frac{5}{9}$    $\frac{8}{9}$     e)  $\frac{1}{5}$    $\frac{3}{5}$

b)  $\frac{4}{6}$    $\frac{2}{6}$     d)  $\frac{3}{4}$    $\frac{3}{4}$     f)  $\frac{1}{8}$    $\frac{8}{8}$

- 5) Tondeka iyi migabane uhereye ku muto ujya ku munini

a)  $\frac{3}{8}, \frac{2}{8}, \frac{7}{8}, \frac{6}{8}, \frac{4}{8}, \frac{1}{8}, \frac{5}{8}, \frac{8}{8}$

b)  $\frac{2}{5}, \frac{1}{5}, \frac{3}{5}, \frac{4}{5}, \frac{5}{5}$

- 6) Tondeka iyi migabane uhereye ku munini ujya ku muto

a)  $\frac{3}{7}, \frac{2}{7}, \frac{7}{7}, \frac{6}{7}, \frac{4}{7}, \frac{1}{7}, \frac{5}{7}$

b)  $\frac{2}{6}, \frac{1}{6}, \frac{3}{6}, \frac{5}{6}, \frac{4}{6}$

- 7) Shaka umugabane wo kuzuza buri mugabane ukurikira kugira ngo haboneke ikizima  
 a)  $\frac{4}{7}$       b)  $\frac{3}{8}$       c)  $\frac{5}{9}$       d)  $\frac{4}{10}$
- 8) Teranya iyi migabane  
 a)  $\frac{3}{7} + \frac{2}{7} =$       b)  $\frac{4}{9} + \frac{2}{9} =$       c)  $\frac{2}{5} + \frac{1}{5} =$
- 9) Kuramo iyi migabane  
 a)  $\frac{8}{9} - \frac{5}{9} =$       b)  $\frac{9}{10} - \frac{3}{10} =$       c)  $\frac{6}{7} - \frac{4}{7} =$
- 10) Shaka agaciro k'umugabane ka buri mubare wahawe  
 a)  $\frac{3}{4}$  bya 100      b)  $\frac{7}{8}$  bya 64      c)  $\frac{5}{6}$  bya 60
- 11) Gwiza yariye  $\frac{2}{5}$  by'umugati yari afite mu gitondo. Shaka igiteranyo cy'umugabane ungana n'umugati amaze kurya niba nimugoroba yarongeye akaryaho  $\frac{1}{5}$ .
- 12) Gatare yabumbishije amatafari  $\frac{5}{7}$  by'amazi yari ari mu kigega. Shaka umugabane ungana n'amazi yasigaranye mu kigega.
- 14) Mutoni yasaruye  $\frac{5}{6}$  by'amashu 360. Shaka umubare w'amashu yasaruye n'uw'ayasigaye mu murima.
- 15) Shema yasomye  $\frac{3}{8}$  by'igitabo ku wa gatanu, ku wa gatandatu na bwo asoma  $\frac{4}{8}$ . Amaze gusoma igice kingana n'uwuhe mugabane?
- 16)  $\frac{7}{8}$  by'abanyeshuri 960 bishyuye amafaranga y'ishuri.  
 a) Shaka umubare w'abanyeshuri bamaze kwishyura amafaranga y'ishuri.  
 b) Abanyeshuri batarishyura amafaranga y'ishuri ni bangahe?

# Isano iri hagati y'ingero z'uburebure



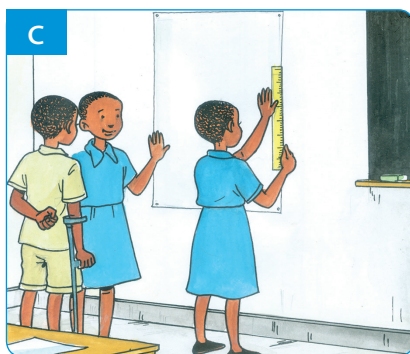
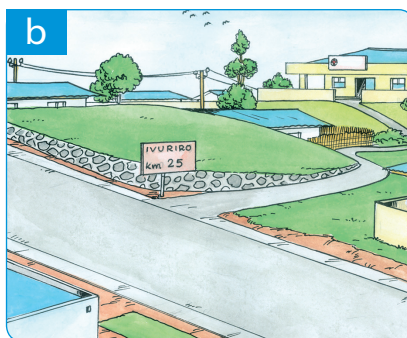
Gahire afite urwuri yororeramo inka ze. Yagiye gusaba ideni muri banki ashaka kurutangaho ingwate. Agezeye ananirwa gusobanura ingano y'urwuri rwe kuko atazi ubugari n'uburebure bwawo. Wamufasha iki kugira ngo atazongera kugira ikibazo nk'icyo?



## 5.1 Ingero z'uburebure

### Igikorwa cya 1

Mwitegereze aya mashusho muvuge ibyo muyabonaho, mutange ingero z'ibikoresho byifashishwa mu gupima uburebure bw'ibintu, abantu n'ahantu.



## Igikorwa cya 2

Mukoreshe imetero mupime ibi bikurikira:

- a) Uburebure n'ubugari by'ikibaho cyo mu ishuri ryanyu.
- b) Uburebure n'ubugari by'urugi rw'ishuri ryanyu.
- c) Uburebure n'ubugari by'akabati k'ibitabo ka mwarimu.

## Igikorwa cya 3

Mukoreshe agacamurongo mupime ibi bikurikira:

- a) Uburebure n'ubugari bw'igitabo k'imibare
- b) Uburebure n'ubugari by'ikayi nini
- c) Uburebure bw'ikaramu

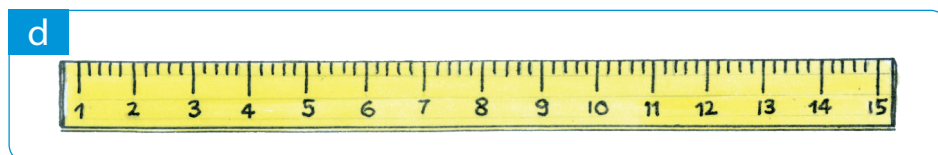
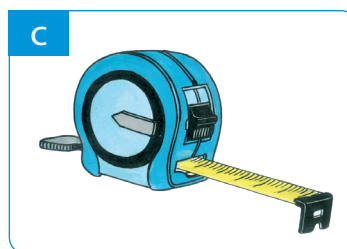
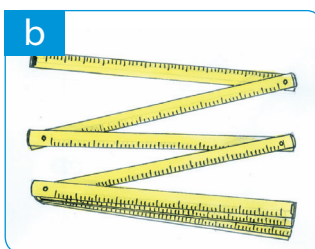
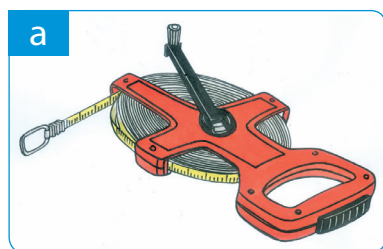
## Igikorwa cya 4

Ni uruhe rugero rw'uburebure rukoreshwa iyo ushaka kumenya ibi bikurikira:

- a) Intera iri hagati y'umugi n'uwundi
- b) Uburebure bw'umuhanda uva i Kigali ukagera i Rubavu
- c) Umuzenguruko w'ikibanza
- d) Ubutumburuke bw'umusozi
- e) Uburebure bw'akabati
- f) Uburebure n'ubugari by'igitabo
- g) Uburebure bw'umwenda

## Igikorwa cya 5

Mwitegereze aya mashusho, muvuge ibyo muyabonaho.



### Nsobanukiwe ko:

Ingero z'uburebure ari:

- |                      |                     |
|----------------------|---------------------|
| 1) Kilometero (km)   | 5) Desimetero (dm)  |
| 2) Hegitometero (hm) | 6) Santimetero (cm) |
| 3) Dekametero (dam)  | 7) Milimetero (mm)  |
| 4) Metero (m)        |                     |
- Metero ni urugero fatizo mu ngero z'uburebure
  - km, hm na dam ni zo ngero z'uburebure ziruta metero
  - dm, cm na mm ni zo ngero z'uburebure zirutwa na metero (m)
  - Iyo upima uburebure, ubugari, ubutambike, ubuhagarike cyangwa ubutumburuke bw'ahantu ukoresha bimwe mu bikoresho bikurikira:

|                 |                  |
|-----------------|------------------|
| – Dekametero    | – Agacamurongo   |
| – Metero buhine | – Metero bushumi |
| – Imetero       | – Umugozi        |

### Igikorwa cya 5

Muvuge ubwoko bw'ibikoresho mwakoresha mupima uburebure bw'ibintu bikurikira

- |                   |                       |
|-------------------|-----------------------|
| a) Inzu y'igorofa | d) Umurima            |
| b) Ikanzu         | e) Akabati            |
| c) Ikibanza       | f) Imyambaro y'ishuri |

### Imyitozo

Uzurisha ijambo rikwiye (metero, km, hm, dam icumi, dm, cm, mm, dekametero)

- a) \_\_\_\_ ni urugero fatizo mu ngero z'uburebure.
- b) Ingero z'uburebure zirutanwa inshuro \_\_\_\_
- c) \_\_\_\_, \_\_\_\_ na \_\_\_\_ ni zo ngero z'uburebure ziruta metero
- d) Ingero z'uburebure zirutwa na metero ni \_\_\_\_, \_\_\_\_ na \_\_\_\_
- e) Iyo ushaka gupima umuzenguruko w'inzu ukoresha \_\_\_\_

## 5.2 Isano iri hagati y'ingero z'uburebure

### Igikorwa

Mwitegereze imbonerahamwe y'ingero z'uburebure, musobanure uko ingero z'uburebure zirutana hagati yazo.

| km | hm | dam          | m            | dm | cm           | mm           |
|----|----|--------------|--------------|----|--------------|--------------|
| 1  | 0  | <del>0</del> | <del>0</del> |    |              |              |
|    |    |              | 1            | 0  | <del>0</del> | <del>0</del> |

### Nsobanukiwe ko:

Ingero z'uburebure zirutana inshuro 10 uva ku rugero ruto ujya ku runini cyangwa uva ku rugero runini ujya ku ruto.

## 5.3 Guhindura ingero z'uburebure

### A. Guhindura ingero z'uburebure uva ku rugero runini ujya ku rugero ruto

### Igikorwa cya 1

Mwitegereze imbonerahamwe y'ingero z'uburebure, muyigane, mukore imyitozo iyikurikira.

| Ingero z'uburebure ziruta metero |    |     | Urugero fatizo mu ngero z'uburebure | Ingero z'uburebure zirutwa na metero |    |    |
|----------------------------------|----|-----|-------------------------------------|--------------------------------------|----|----|
| km                               | hm | dam | m                                   | dm                                   | cm | mm |
| 1                                | 0  |     |                                     |                                      |    |    |
|                                  | 1  | 0   |                                     |                                      |    |    |
|                                  |    | 1   | 0                                   |                                      |    |    |
|                                  |    |     | 1                                   | 0                                    |    |    |
|                                  |    |     |                                     | 1                                    | 0  |    |
|                                  |    |     |                                     |                                      | 1  | 0  |

$$\text{km } 1 = \text{hm } 10$$

$$\text{hm } 1 = \text{dam } 10$$

$$\text{dam } 1 = \text{m } 10$$

$$\text{m } 1 = \text{dm } 10$$

$$\text{dm } 1 = \text{cm } 10$$

$$\text{cm } 1 = \text{mm } 10$$



### Nsuzuma ngusuzume

- a) km 8 = hm \_\_\_\_\_ c) Hm 2 = dam \_\_\_\_\_  
b) km 7 = dam \_\_\_\_\_ d) Hm 4 = m \_\_\_\_\_

### B. Guhindura ingero z'uburebure uva ku rugero ruto ujya ku rugero runini

#### Igikorwa cya 2

Mwitegereze imbonerahamwe yo guhindura ingero z'uburebure, muyigane, mukore imyitozo.

| Ingero z'uburebure ziruta metero |              |              | Urugero fatizo mu ngero z'uburebure | Ingero z'uburebure zirutwa na metero |              |              |
|----------------------------------|--------------|--------------|-------------------------------------|--------------------------------------|--------------|--------------|
| km                               | hm           | dam          | m                                   | dm                                   | cm           | mm           |
| 1                                | <del>0</del> |              |                                     |                                      |              |              |
|                                  | 1            | <del>0</del> |                                     |                                      |              |              |
|                                  |              | 1            | <del>0</del>                        |                                      |              |              |
|                                  |              |              | 1                                   | <del>0</del>                         |              |              |
|                                  |              |              |                                     | 1                                    | <del>0</del> |              |
|                                  |              |              |                                     |                                      | 1            | <del>0</del> |

hm 10 = km 1

m 10 = dam 1

cm 10 = dm 1

dam 10 = hm 1

dm 10 = m 1

mm 10 = cm 1



### Reka nisuzume

- a) hm 90 = km \_\_\_\_\_ c) dam 60 = hm \_\_\_\_\_  
b) dam 800 = km \_\_\_\_\_ d) m 500 = hm \_\_\_\_\_

#### Nsobanukiwe ko:

- Uhindura ingero z'uburebure wifashisha imbonerahamwe y'ingero ukandikamo imibare wahawe.
- Uva ku rugero runini ujya ku ruto wongeraho zero (0).
- Uva ku rugero ruto ujya ku rugero runini ukuraho zero (0). Ibi bikorwa gusa ku mubare uherwa n'amazeru.

## Imyitozo



Hindura mu rugero wabajijwe

- |                       |                          |
|-----------------------|--------------------------|
| a) m 450 = dam _____  | f) dam 234 = m _____     |
| b) hm 13 = m _____    | g) km 8 m 7 = m _____    |
| c) dam 56 = dm _____  | h) dm 4 mm 7 = mm _____  |
| d) mm 3500 = dm _____ | i) m 6 dm 8 = dm _____   |
| e) dm 4300 = m _____  | j) dam 9 cm 4 = cm _____ |

## 5.4 Kugereranya ingero z'uburebure

### Igikorwa

Mukoreshe  $>$ ,  $<$  na  $=$  mugereranye ingero z'uburebure zikurikira mukurikije urugero mwahawe.

### Urugero:

- a) dam 20  $<$  hm 20  
 b) m 450  $<$  km 9  
 c) dm 7  $>$  cm 58

| km | hm | dam | m | dm | cm | mm |
|----|----|-----|---|----|----|----|
|    | 2  | 0   |   |    |    |    |
| 2  | 0  | 0   |   |    |    |    |
|    | 4  | 5   | 0 |    |    |    |
| 9  | 0  | 0   | 0 |    |    |    |
|    |    |     |   | 7  | 0  |    |
|    |    |     |   | 5  | 8  |    |

- |                                      |                                        |
|--------------------------------------|----------------------------------------|
| a) m 234 <input type="text"/> hm 23  | d) dam 87 <input type="text"/> dm 8700 |
| b) km 3 <input type="text"/> dam 300 | e) cm 256 <input type="text"/> dm 25   |
| c) dm 49 <input type="text"/> m 9    | f) mm 57 <input type="text"/> cm 5     |

### Nsobanukiwe ko:

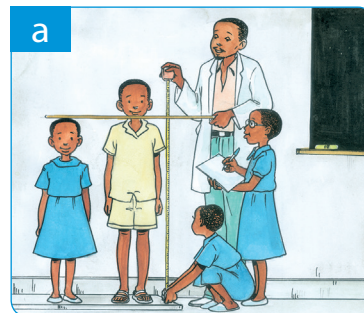
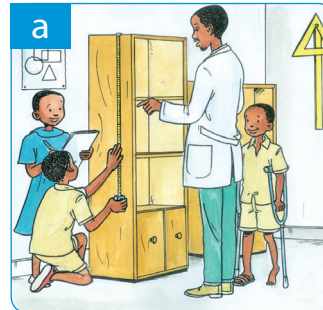
Iyo ugereranya ingero z'uburebure, ubanza guhindura mu rugero ruto wahawe mu kibazo hanyuma ukagereranya imibare ukoresheje  $<$ ,  $>$  na  $=$



## 5.5 Kugereranya ingero z'uburebure upima uburebure bw'ibintu binyuranye

### Igikorwa cya 1

Mwitegereze aya mashusho, muvuge ibyo muyabonaho.



### Nsobanukiwe ko:

- Iyo ugereranya uburebure bw'ibintu binyuranye, urabipima maze ukagereranya uburebure bwabyo ugendeye ku mibare.
- Ukamenya ikigufi n'ikirekire ubigereranyije.

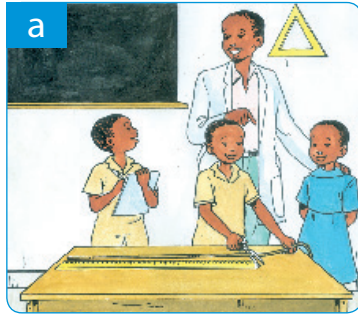
### Igikorwa cya 2

- Ikibuga dukiniramo umupira w'amaguru gifite umuzenguruko wa m 300. Ikibuga cy'umupira w'amaguru cya sitade Amahoro gifite umuzenguruko wa m 400. Mugereranye ibi bibuga byombi muvuge ikinini n'igito.
- Mupime uburebure n'ubutambike by'ishuri mwigamo. Mugereranye ibipimo mubonye.

## 5.6 Kugereranya uburebure bw'ahantu usanisha intera n'inshuro zirimo

### Igikorwa cya 1

Mwitegereze aya mashusho, muvuge ibyo muyabonaho.



### Igikorwa cya 2

Mugereranye maze musubize ibi bikurikira:

- Umuhanda wa km 20 urimo inshuro zingahe z'undi wa km 4?
- Muhoza yagenze km 30 naho mukuru we Shema agenda km 5. Vuga uwagenze ahantu harehare. Urugendo rwa Muhoza rukubye inshuro zingahe urwa Shema?

### Nsobanukiwe ko:

Kugira ngo umenye inshuro uburebure bw'ahantu buruta ubwo ahandi hantu ufata uburebure bw'ahantu harehare ukabugabanya n'uburebure bw'ahagufi.

### Igikorwa cya 3

- Mutere agapira n'amaboko maze muvuge uburebure buri hagati yanyu n'aho ako gapira kaguye. Nimurangiza muhapime murebe ko uburebure mwavuze mbere yo gupima bungana n'ubwo mubonye nyuma yo gupima.
- Mwitegereze ikibuga mukiniraho umupira, mugenekereze umuzenguruko wacyo. Mugipime murebe ko umuzenguruko mwavuze ungana n'uwo mubonye nyuma yo gupima.

## Imyitozo



- 1) Koresha  $>$ ,  $<$  na  $=$  ugereranye
  - a) km 3 m 5  hm 30
  - b) hm 4 m 7  m 407
  - c) dm 575  m 57
  - d) dam 49  hm 9
- 2) Umuhanda ufite km 45 z'uburebure urimo inshuro zingahe z'undi ufite km 9 z'uburebure?

## 5.7 Gutondeka ingero z'uburebure

A. Itondeka ry'ingero z'uburebure uva ku rugero ruto ujya ku rugero runini

### Igikorwa

Mutondeke izi ngero z'uburebure muhereye ku rugero ruto mujya ku runini mukurikije urugero mwahawe.

### Urugero:

Km 5 dam 7, dam 786, hm 57  $\rightarrow$  km 5 dam 7, hm 57, dam 786

| km | hm | dam | m | dm | cm | mm |
|----|----|-----|---|----|----|----|
| 5  | 0  | 7   |   |    |    |    |
| 5  | 7  | 0   |   |    |    |    |
| 7  | 8  | 6   |   |    |    |    |

- a) m 125, hm 2, dam 8
- b) cm 34, mm 245, dm 5
- c) 9 km, hm 75, m 8759
- d) dm 765, m 98, dam 6
- e) dam 54, km 8, m 256
- f) cm 356, m 7, dm 49

### Nsobanukiwe ko:

Iyo utondeka ingero z'uburebure ubanza guhindura ingero zose baguhaye mu rugero ruto rurimo warangiza ugatondeka uva ku rugero ruto ujya ku rugero runini uhereye ku mibare yazo.

## B. Gutondeka ingero z'uburebure uva ku rugero runini ujya ku rugero ruto

### Igikorwa

Mutondeke izi ngero z'uburebure muhereye ku rugero runini mujya ku ruto mukurikije urugero mwahawe.

### Urugero:

hm 45, dam 295, m 846 → m 846 , hm 45, dam 295

| km | hm | dam | m | dm | cm | mm |
|----|----|-----|---|----|----|----|
| 4  | 5  | 0   | 0 |    |    |    |
| 2  | 9  | 5   | 0 |    |    |    |
| 8  | 4  | 6   | 0 |    |    |    |

- a) m 785, hm 9, dam 54
- b) m 247, dam 79, hm 76
- c) 39 cm, mm 91, dm 49
- d) dam 237, km 8, hm 56
- e) dm 797, dam 8, m 92
- f) dam 59, km 9, hm 48

### Nsobanukiwe ko:

Iyo utondeka ingero z'uburebure ubanza guhindura ingero zose baguhaye mu rugero ruto rurimo warangiza ugatondeka uva ku rugero runini ujya ku rugero ruto uhereye ku mibare yazo.

### Imyitozo



- 1) Tondeka izi ngero z'uburebure uhereye ku rugero ruto ujya ku runini:
  - a) m 7, mm 985, cm 565
  - b) dm 897, m 79, dam 9
  - c) cm 324, mm 765, m 8
  - d) mm 98, dm 987, cm 87
- 2) Tondeka izi ngero z'uburebure uhereye ku rugero runini ujya ku ruto
  - a) km 6, m 9124, dam 698
  - b) hm 74, km 9, dam 768
  - c) dam 7, dm 987, cm 3 695
  - d) m 76, cm 4 897, dm 915

## 5.8 Guteranya ingero z'uburebure

### Igikorwa

Koresha imbonerahamwe y'ingero z'uburebure ukore imyitozo ukurikije urugero wahawe.

Urugero:  $\text{km } 8 + \text{dam } 18 = \text{m } 8 \text{ } 180$

| km  | hm | dam | m | dm | cm | mm |
|-----|----|-----|---|----|----|----|
| 8   | 0  | 0   | 0 |    |    |    |
| + ↓ | 1  | 8   | 0 |    |    |    |
| 8   | 1  | 8   | 0 |    |    |    |

- a)  $\text{km } 9 + \text{m } 789 = \text{m}$       d)  $\text{m } 5 + \text{cm } 500 = \text{dam}$   
 b)  $\text{hm } 56 + \text{m } 238 = \text{m}$       e)  $\text{dm } 375 + \text{m } 2 \text{ dm } 5 = \text{dam}$   
 c)  $\text{dam } 475 + \text{m } 250 = \text{km}$       f)  $\text{cm } 35 + \text{m } 9 = \text{cm}$

### Nsobanukiwe ko:

Iyo uteranya ingero z'uburebure ubanza guhindura ingero zose baguhaye mu rugero wabajijwe warangiza ukabona guteranya.



### Nsuzuma ngusuzume

Mukoreshe imbonerahamwe y'ingero z'uburebure, mwuzuze urugero rubura muri buri mwitozo.

- a)  $\text{m } 145 + \text{m } 2 \text{ } 855 = \text{___ } 3$       d)  $\text{dam } 76 + \text{m } 240 = \text{___ } 1$   
 b)  $\text{hm } 39 + \text{dam } 610 = \text{___ } 10$       e)  $\text{dm } 63 + \text{cm } 37 = \text{___ } 667$   
 c)  $\text{hm } 74 + \text{___ } 260 = \text{km } 10$       f)  $\text{cm } 27 + \text{m } 6 = \text{___ } 6 \text{ } 270$



### Reka nisuzume

- a)  $\text{hm } 47 + \text{dam } 930 = \text{km } \text{___}$   
 b)  $\text{m } 3 \text{ cm } 8 + \text{dm } 25 = \text{cm } \text{___}$   
 c)  $\text{m } 45 + \text{cm } 5 \text{ } 500 = \text{hm } \text{___}$

## 5.9 Amahurizo yo guteranya ingero z'uburebure

### Urugero:

Mu rwego rw'ubukerarugendo, Muhoza yagenze km 7 ku wa mbere, ku wa Kabiri agenda hm 80 naho ku wa gatatu agenda dam 400. Shaka km yagenze muri iyo minsi itatu.

| Ibyo mfite                             | Ibyo mbazwa               | Inzira n'igisubizo                                                                         |
|----------------------------------------|---------------------------|--------------------------------------------------------------------------------------------|
| 1) Ku wa Mbere yagenze km 7            | Km yagenze mu minsi itatu | Km yagenze mu minsi itatu:<br>$\text{km } 7 + \text{km } 8 + \text{km } 4 = \text{km } 19$ |
| 2) Ku wa Kabiri yagenze hm 80 = km 8   |                           |                                                                                            |
| 3) Ku wa gatatu yagenze dam 400 = km 4 |                           |                                                                                            |



### Nsuzuma ngusuzume

- 1) Umuyobozi w'imodoka yanditse uburebure bw'ingendo yakoze mu minsi itatu asanga ari km 359 umunsi wa mbere, hm 4 360 ku munsi wa kabiri na km 405 ku munsi wa gatatu. Shaka umubare wa km amaze kugenda muri iyo minsi itatu.
- 2) Mutesi afite m 175 z'igitambaro naho musaza we Gasana afite dm 1 250. Ubwo bombi bafite igitambaro kireshya na metero zingahe?
- 3) Mukiza yaguze umugozi wa m 150, ageze mu rugo asanga ari mugufi. Asubira kugura undi wa dm 2 500. Ubwo iyo migozi yombi ireshya na m zingahe?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo guteranya ingero, ubanza kwerekana ibyo baguhaye. Ugakurikizaho ibyo bakubaza hanyuma ugateranya ibyo baguhaye kugira ngo ubone igisubizo. Mbere yo guteranya ingero ubanza guhindura mu rugero bakubajije.



## Reka nisuzume



- 1) Umunyonzi yagenze m 900 ava iwe ajya ku iseta. Agezeyo atwara umugenzi ku isoko riri kuri hm 11. Shaka hm yagenze kuva iwe kugera ku isoko.
- 2) Mu myitozo abasiganwa ku maguru birutse km 21 mu gitondo naho nimugoroba biruka dam 1 200. Shaka umubare wa hm birutse uwo muni.

## Imyitozo



- 1) Umuhanda uva i Kigali ujya i Huye ureshya na km 125 naho uva i Huye ujya i Rusizi hm 1670. Ubwo uvuye i Kigali ukajya i Rusizi wagenda km zingahe?
- 2) Kaneza afite umurima ureshya na m 95 z'uburebure naho mushiki we akagira ureshya na m 105 uri haruguru y'uwa musaza we. Ubwo iyo mirima uyiteranyije yombi yareshya gute?

## 5.10 Gukuramo ingero z'uburebure n'umubare ushyitse

### Igikorwa

Koresha imbonerahamwe y'ingero z'uburebure ukore imyitozo ukurikije urugero wahawe.

### Urugero:

$$\text{dam } 425 - \text{km } 3 = \text{dam } 125$$

| km  | hm | dam | m | dm | cm | mm |
|-----|----|-----|---|----|----|----|
| 4   | 2  | 5   |   |    |    |    |
| - 3 | 0  | 0   |   |    |    |    |
| 1   | 2  | 5   |   |    |    |    |

- |                         |                        |
|-------------------------|------------------------|
| a) hm 5 – m 298 = m     | d) cm 75 – mm 579 = mm |
| b) km 9 – dam 832 = dam | e) dam 753 – hm 69 = m |
| c) dm 74 – cm 490 = dm  | f) dm 835 – dam 7 = dm |

### Nsobanukiwe ko:

Iyo ukuramo ingero z'uburebure ubanza guhindura ingero zose baguhaye mu rugero wabajijwe, warangiza ukabona gukuramo.



### Nsuzuma ngusuzume

Mukoreshe imbonerahamwe y'ingero z'uburebure mwuzuze urugero rubura muri buri mwitoto.

- a)  $\text{km } 5 - \text{hm } 28 = \text{--- } 220$       d)  $\text{dam } 415 - \text{--- } 3 = \text{m } 1\ 150$   
b)  $\text{hm } 9 - \text{dam } 73 = \text{--- } 170$       e)  $\text{dam } 64 - \text{m } 440 = \text{--- } 2$   
c)  $\text{--- } 724 - \text{dm } 62 = \text{cm } 104$       f)  $\text{m } 36 - \text{cm } 973 = \text{--- } 2\ 627$

## 5.11 Amahurizo yo gukuramo ingero z'uburebure

### Urugero:

Abakozi bakora umuhanda batangiye gusana umuhanda ufite km 56. Niba bamaze gusana dam 4 600 ubwo basigaye gusana km zingahe?

| Ibyo mfite                                                 | Ibyo mbazwa                              | Igisubizo                                                                            |
|------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------|
| 1) Uburebure bw'umuhanda uzasanwa ni km 56                 | Uburebure bw'umuhanda utarasanwa muri km | Uburebure bw'umuhanda utarasanwa:<br>$\text{km } 56 - \text{km } 46 = \text{km } 10$ |
| 2) Uburebure bw'umuhanda umaze gusanwa ni dam 4600 = km 46 |                                          |                                                                                      |



### Nsuzuma ngusuzume

- 1) Gisa yagiye mu marushanwa yo kwiruka km 42, amaze kwiruka dam 2900 arananirwa yikura mu irushanwa. Ubwo yari asigaye hm zingahe ngo arangize irushanwa?
- 2) Ishyirahamwe ry'abubatsi b'imihanda ryahawe akazi ko gushyira kaburimbo mu muhanda wa dam 987. Bamaze kuyishyira muri m 5870 bararihagarika. Barihagaritse risigaye km zingahe ngo rirangize akazi kose?



### Nsobanukiwe ko:

Iyo ukora amahurizo yo gukuramo ingero z'uburebure ubanza kugaragaza ibyo baguhaye n'ibyo bakubaza mu ihurizo ugahindura mu rugero ruto, ugakuramo, hanyuma ugahindura mu rugero bakubajije.



### Reka nisuzume

- 1) Kariza yaguze m 175 z'ijyora agurishaho dam 9. Yasigaranye m zingahe?
- 2) Muhizi afite cm 186 z'uburebure. Kaneza afite cm 169. Ni nde muremure muri bo? Amurusha cm zingahe?

### Imyitozo

- 1) Gisa yari afite dam 12 z'ijyora maze akuraho m 20 azidodeshamo imyenda y'abana. Yasigaranye m zingahe?
- 2) Ishimwe na Mugisha basimbutse umurambararo. Ishimwe asimbuka m 3. Mugisha asimbuka dm 25. Ni nde wasimbutse harehare? Yamurushije cm zingahe?

## 5.12 Gukuba ingero z'uburebure n'umubare ushyitse

### Igikorwa cya 1

Koresha imbonerahamwe y'ingero z'uburebure ukore imyitozo ukurikije urugero wahawe.

Urugero: m  $125 \times 4 =$  hm 5

| km | hm | dam | m | dm | cm | mm |
|----|----|-----|---|----|----|----|
|    | 1  | 2   | 5 |    |    |    |
|    | ×  |     | 4 |    |    |    |
|    | 5  | 0   | 0 |    |    |    |

+1' +2'

- a) m 2 cm  $3 \times 3 =$  cm \_\_\_\_
- b) dam 42  $\times 5 =$  hm \_\_\_\_
- c) hm 5 dam  $4 \times 2 =$  m \_\_\_\_
- d) m 81  $\times 5 =$  dm \_\_\_\_

### Nsobanukiwe ko:

Iyo ukuba ingero z'uburebure n'umubare ushyitse ubanza ugakuba nk'uko bisanzwe hanyuma igikubo ubonye ukagihindura mu rugero wabajijwe.

### Imyitozo



Mukoreshe imbonerahamwe y'ingero z'uburebure mwuzuze urugero rubura muri buri mwitozo.

- a) m  $375 \times 2 =$  \_\_\_ 75                      d) dam 4 m  $8 \times 5 =$  \_\_\_ 24  
b) m 72 dm  $3 \times 3 =$  \_\_\_ 2 169              e) m 4 cm  $2 \times 6 =$  \_\_\_ 2 412  
c) hm  $45 \times 4 =$  \_\_\_ 18                      f) dm  $215 \times 8 =$  \_\_\_ 172

## 5.13 Amahurizo yo gukuba ingero z'uburebure n'umubare ushyitse

### Urugero:

Abacuruzi 4 bagurishije m 25 z'ijyora buri wese. Shaka uburebure bw'amajyora yose bagurishije muri hm.

| Ibyo mfite                                        | Ibyo mbazwa                                | Inzira n'igisubizo                                                             |
|---------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------|
| 1) Umubare w'abacuruzi ni 4                       | Uburebure bw'amajyora yagurishijwe muri hm | Uburebure bw'amajyora yagurishijwe<br>$= m\ 25 \times 4$<br>$= m\ 100 = hm\ 1$ |
| 2) Uburebure bwa buri jyora ryagurishijwe ni m 25 |                                            |                                                                                |



### Nsuzuma ngusuzume

- Shaka uburebure bw'amajyora 6 niba buri jyora rifite m 50.
- Shema, Keza na Mucyo buri wese afite m 30 z'urutsinga rw'amashanyarazi. Bateranyije izo nsinga zose bagira urutsinga rureshya rute?

- 3) Kazuba yaguze amajyora 56. Niba buri jyora rireshya na m 15, ubwo ayo majyora yose areshya ate?

**Nsobanukiwe ko:**

- Iyo ukora amahurizo yo gukuba ingero z'uburebure n'umubare ushyitse ubanza kwerekana ibyo baguhaye mu ihurizo, ugakurikizaho ibyo bakubaza, hanyuma ugakuba, ugahindura mu rugero bakubajije.



**Reka nisuzume**

- 1) Shaka uburebure bw'umuturirwa w'amagorofa 8 niba buri gorofa rifite m 4 z'uburebure.
- 2) Mahoro afite ibidongi 9 by'ubudodo ashaka gukoramo ikidongi kimwe. Shaka uburebure bw'ikidongi azagira niba buri kidongi gifite m 100 z'uburebure.
- 3) Ikompanyi ikora imihanda ikora km 7 buri munsu. Shaka uburebure bw'umuhanda iyo kompanyi ikora mu munsu 29.

**Imyitozo**



- 1) Abacuruzi 6 bagabanye ijyora buri wese atwara irifite dam 9. Iryo jyora bagabanye ryari rifite m zingahe z'uburebure?
- 2) Ngarambe yaguriye abana be 8 ibitambaro byo kudodeshamo imyambaro y'ishuri. Niba yaraguriye buri mwana m 5, ubwo bese hamwe yabaguriye dam zingahe?
- 3) Umuturirwa munini ku isi ugizwe n'amagorofa 127. niba buri gorofa riresha na m 5, ubwo uwo muturirwa wose ureshya ute?

## 5.14 Kugabanya ingero z'uburebure n'umubare ushyitse

### Igikorwa cya 1

Koresha imbonerahamwe yo guhindura ingero z'uburebure ukore imyitozo ukurikije urugero wahawe.

**Urugero:** dam 820 : 5 = dam 1 640 = m 1 640

|      |     |    |    |     |   |    |    |    |
|------|-----|----|----|-----|---|----|----|----|
| 820  | 5   | km | hm | dam | m | dm | cm | mm |
| - 5  | 164 | 1  | 6  | 4   | 0 |    |    |    |
| 32   |     |    |    |     |   |    |    |    |
| - 30 |     |    |    |     |   |    |    |    |
| 20   |     |    |    |     |   |    |    |    |
| - 20 |     |    |    |     |   |    |    |    |
| 00   |     |    |    |     |   |    |    |    |

- |                            |                            |
|----------------------------|----------------------------|
| a) dm 580 : 5 = cm ____    | d) cm 480 : 8 = dm ____    |
| b) dam 2 400 : 6 = km ____ | e) m 1 200 : 3 = hm ____   |
| c) mm 5 400 : 9 = dm ____  | f) dm 2 000 : 4 = dam ____ |

### Nsobanukiwe ko:

Iyo ugabanya ingero z'uburebure ubanza kugabanya mu mahembe hanyuma ikigabanyo ubonye ukagihindura mu rugero wabajijwe.

### Igikorwa cya 2

Mukoreshe imbonerahamwe yo guhindura ingero z'uburebure mwuzuze urugero rubura kuri buri mwitozo.

- |                            |                            |
|----------------------------|----------------------------|
| a) hm 248 : 8 = ____ 3 100 | d) cm 680 : 4 = ____ 17    |
| b) dam 485 : 5 = ____ 970  | e) dm 650 : 5 = ____ 13    |
| c) m 2 800 : 7 = ____ 4    | f) cm 960 : 3 = ____ 3 200 |

## 5.15 Amahurizo yo kugabanya ingero z'uburebure n'umubare ushyitse

**Urugero:** Abadozi 8 bagabanye ku buryo bungana igitambaro cy'umwenda cya m 96. Buri wese yahawe igitambaro cy'umwenda kireshya gite?

| Ibyo mfite                  | Ibyo mbazwa                       | Inzira n'igisubizo                   |
|-----------------------------|-----------------------------------|--------------------------------------|
| Uburebure bw'ijyora ni m 96 | Uburebure bw'ijyora rya buri wese | Uburebure bw'ijyora buri wese yahawe |
| Umubare w'abantu ni 8       |                                   | $= m\ 96 : 8 = m\ 12$                |



### Nsuzuma ngusuzume

- 1) Abacuruzi 6 b'insinga z'amashanyarazi bagabanye ku buryo bungana m 240 z'urutsinga. Buri wese yatwaye dam zingahe?
- 2) Abantu 9 bagabanye ku buryo bungana igisheke gifite dm 18 z'uburebure. Buri wese yatwaye igisheke gifite cm zingahe?

### Nsobanukiwe ko:

- Iyo ukora amahurizo yo kugabanya ingero z'uburebure ubanza kuvana mu ihurizo ibyo baguhaye, ugakurikizaho ibyo bakubaza, ukagabanya.
- Ukagabanya igisubizo ubonye ukagihindura mu rugero bakubajije.



### Reka nisuzume

- 1) Tunga arashaka kubaka umuturirwa ufite m 50 z'uburebure. Niba ashaka ko uwo muturirwa uzaba ugizwe n'amagorofa 10 angana ubwo buri gorofa rizaba rireshya rite?
- 2) Umurenge wacu wahaye abantu 8 akazi ko gukubura umuhanda ufite hm 8. Nibawugabana ku buryo bungana buri wese azakubura ahafite m zingahe?

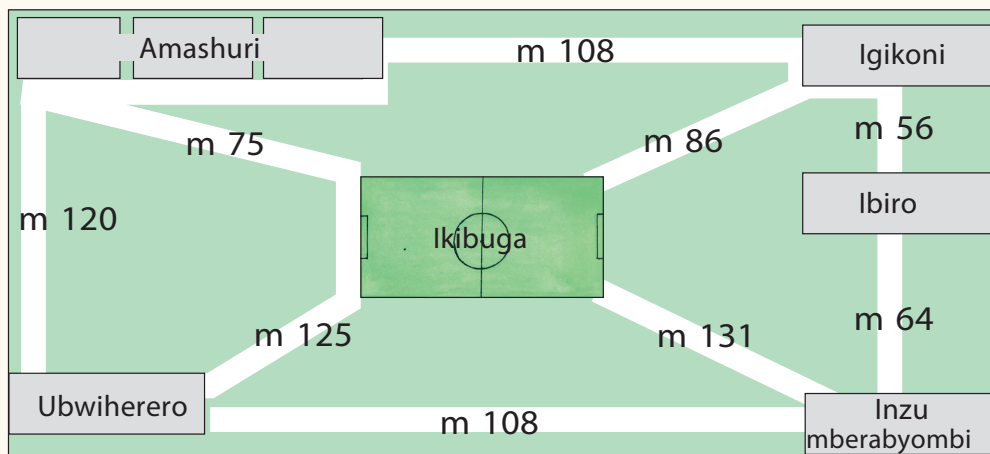
## Imyitozo



Umucuruzi afite umwenda upima m 49 z'uburebure.  
Nacamo ibipande 7 bingana ubwo buri gipande kizaba gifite dm zingahe?

### 5.16 Isuzuma risoza umutwe wa 5

- 1) Hindura izi ngero mu rugero wabajijwe
  - a) km 2 m 6 = m \_\_\_\_
  - b) dm 240 = m \_\_\_\_
  - c) m 7 mm 8 = mm \_\_\_\_
  - d) dm 2 400 = dam \_\_\_\_
- 2) Koresha <, > na = ugereranye izi ngero z'uburebure
  - a) m 456  hm 8
  - b) km 8  dam 789
  - c) mm 46  cm 4
  - d) dam 7  m 79
- 3) Tondeka uherye ku rugero ruto ujya ku rugero runini m 259, hm 2 m 9, dam 29 m 5
- 4) Tondeka uherye ku rugero runini ujya ku rugero ruto km 6 dam 8, hm 608, dam 68
- 5) Kora
  - a) dam  $75 \times 4 =$  km
  - b) m  $590 : 5 =$  dm
  - c) m 4 cm  $8 \times 5 =$  dm
  - d) dm  $6400 : 8 =$  dam
- 6) Itegereze iyi shusho usubize ibibazo



Ibibazo

- a) Hagati y'amashuri n'ikibuga cy'umupira w'amaguru hari dm zingahe?
  - b) Hagati y'amashuri n'ubwiherero hari dam zingahe?
  - c) Uvuye ku mashuri ukajya mu biro by'ubuyobozi, waba ugenze m zingahe?
  - d) Uvuye ku mashuri ukajya mu gikoni, waba ugenze m zingahe?
  - e) Kamana yavuye ku mashuri yiruka aca ku gikoni, anyura ku biro, akomereza ku cyumba k'inama, aca ku bwiherero maze akomereza ku kibuga cy'umupira asubira ku mashuri aho yaturutse. Ubwo yagenze m zingahe zose hamwe?
- 7) Soma aka gakuru neza usubize ibibazo.
- Jabo, Gatari, Kamanzi na Kagabo basiganwe kwiruka kugeza igihe uzajya yumva ananiwe azajya yivana mu isiganwa. Jabo yiruka km 8 arananirwa, Gatari yiruka dam 897 arananirwa, Kamanzi ananirwa amaze kwiruka hm 95 naho Kagabo we ananirwa kuri m 9 759.
- a) Muri bose ni nde wirutse m nyinshi? Ni zingahe?
  - b) Muri bose ni nde wirutse m nkeya? Ni zingahe?
  - c) Batondeke uhaye ku wirutse ahantu harehare ujya kuwirutse ahantu hagufi
  - d) Batondeke uhaye ku wirutse ahantu hagufi ujya ku wirutse ahantu harehare
- 8) Shimwa bamuhaye intego yo kwiruka km 50 adahagaze, amaze kwiruka dam 487 arananirwa yemera ko atsinzwe intego. Yananiwe asigaje kwiruka m zingahe?
- 9) Ku munsu w'ikiruhuko niruka m 500 inshuro 6. Ubwo niruka km zingahe?
- 10) Uwase yabonye umugozi wo gusimbuka ufite m 36, awugabanyamo imigozi 9 ingana. Shaka uburebure bwa buri mugenzi muri cm.

# Ingero z'uburemere kuva kuri kg kugera kuri g



Sano ni umuhinzi w'ikitegererezo mu murenge wacu. Ibyo asaruye arabigurisha byose bigashira. Sano ntajya akoresha umunzani mu gupima ibyo asaruye cyangwa agurishije. Wamugira inama yo kwiga iki mu mibare kugira ngo arusheho gukora akazi ke neza?



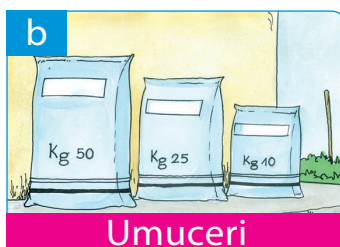
## 6.1 Ingero z'uburemere

### Igikorwa cya 1

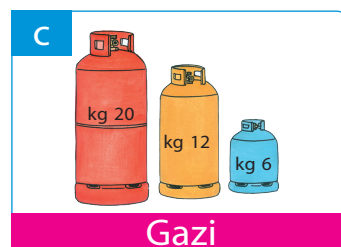
Mwitegereze aya mashusho, muvuge ibyo muyabonaho.



Isukari



Umuceri



Gazi

### Igikorwa cya 2

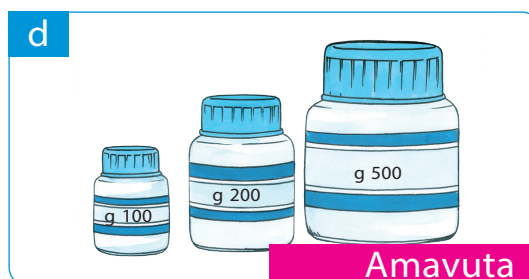
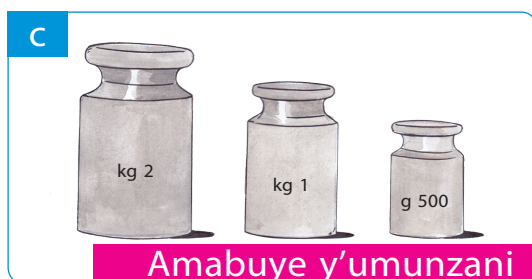
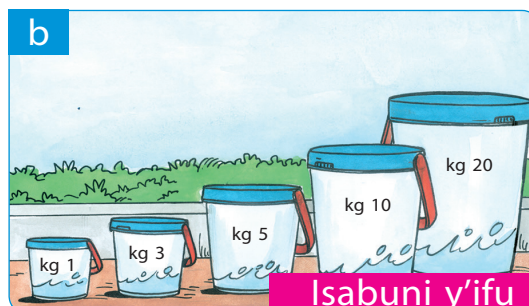
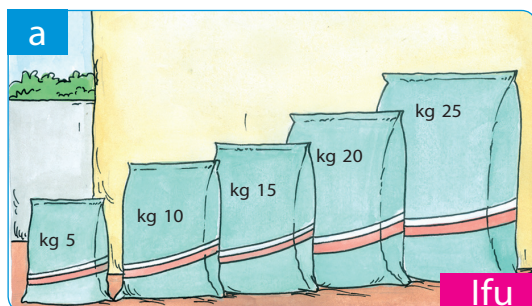
Mwitegereze aya mashusho, muvuge ibyo muyabonaho.





### Igikorwa cya 3

Musome maze mwandike amazina n'uburemere bw'ibintu biri ku mashusho.



### Igikorwa cya 4

Muganire ku kamaro ko gukoresha umunzani ndetse n'ahandi hantu ingero z'uburemere zikoreshwa hatagari mu mashusho.

#### Nsobanukiwe ko:

- Garama (g) ni rwo rugero fatizo mu ngero z'uburemere.
- Garama (g) ikoreshwa iyo ibyapimwe ari utuntu tworoshye nk'amavuta yo kwisiga, imiti, ...
- Kilogarama (kg) ni rwo rugero mu ngero z'uburemere rukunze gukoreshwa cyane.
- Usibye kg na g hari n'izindi ngero z'uburemere nka hg (hegitogarama) na dag (dekagarama)
- Iminzani y'isaha, iya gakwege n'uw'amabuye ni yo idufasha kumenya uburemere bw'ibintu bitandukanye.
- Ingero z'uburemere zikoreshwa mu bucuruzi, mu nganda, mu rugo, kwa muganga, mu bwikorezi, mu myidagaduro.

## 6.2 Isano iri hagati y'ingero z'uburemere

### Igikorwa

Mwitegereze imbonerahamwe y'ingero z'uburebure, musobanure uko ingero z'uburebure zirutana hagati yazo.

| kg | hg | dag          | g            | dg | cg           | mg           |
|----|----|--------------|--------------|----|--------------|--------------|
| 1  | 0  | <del>0</del> | <del>0</del> |    |              |              |
|    |    |              | 1            | 0  | <del>0</del> | <del>0</del> |

### Nsobanukiwe ko:

Ingero z'uburemere zirutana inshuro 10 uva ku rugero ruto ujya ku runini cyangwa uva ku rugero runini ujya ku ruto.

## 6.3 Kwandika no gusoma ingero z'uburemere kuva kuri kg kugera kuri g

### Igikorwa cya 1

Mwitegereze ishusho, musobanure ibiri gukorwa.



## Igikorwa cya 2

Itegereze uce imbonerahamwe y'ingero z'uburemere imeze nk'iyi, maze wandike uko basoma buri rugero mu ikayi yawe.

| Ingero z'uburemere ziruta garama |    |     | Urugero fatizo mu ngero z'uburemere | Ingero z'uburemere zirutwa na garama |    |    |
|----------------------------------|----|-----|-------------------------------------|--------------------------------------|----|----|
| kg                               | hg | dag | g                                   | dg                                   | cg | mg |
| 1                                | 0  |     |                                     |                                      |    |    |
|                                  | 1  | 0   |                                     |                                      |    |    |
|                                  |    | 1   | 0                                   |                                      |    |    |
|                                  |    |     | 1                                   | 0                                    |    |    |
|                                  |    |     |                                     | 1                                    | 0  |    |
|                                  |    |     |                                     |                                      | 1  | 0  |
|                                  |    |     |                                     |                                      |    | 1  |

## Imyitozo



- 1) Soma uhuze impine z'ingero z'uburemere n'uko zisomwa ukurikije urugero wahawe

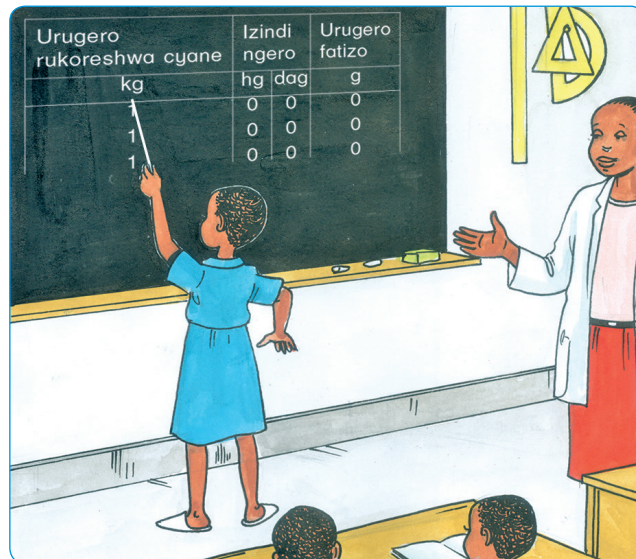
|     |   |              |
|-----|---|--------------|
| kg  |   | Hegitogarama |
| hg  | → | Garama       |
| dag |   | Kilogarama   |
| g   |   | Dekagarama   |

- 2) Subiza yego cyangwa oya
  - a) Ni byiza kugura ibintu bidapimye.
  - b) Kg ni rwo rugero fatizo mu ngero z'uburemere.
  - c) Garama (g) ni rwo rugero rw'uburemere rukoreshe cyane kurusha izindi.

## 6.4 Guhindura ingero z'uburemere kuva kuri kg kugera kuri g

### Igikorwa cya 1

Mwitegereze iyi shusho, muvuge ibyo muyibonaho.



### Igikorwa cya 2

Muce imbonerahamwe yo guhindura ingero z'uburemere mu makayi y'imyitozo. Mukore ibibazo mukurikiza ibyo mwabonye mu gikorwa cya 1.

- |                     |                    |
|---------------------|--------------------|
| a) kg 5 = dag ____  | c) dag 43 = g ____ |
| b) hg 12 = dag ____ | d) hg 4 = g ____   |

#### Nsobanukiwe ko:

- Ingero z'uburemere zirutanwa inshuro icumi hagati yazo
- Iyo uhindura ingero z'uburemere wifashisha imbonerahamwe yo guhindura ukandikamo imibare wahawe
- Iyo uva ku rugero runini ujya ku rugero ruto wongeraho zero (0)
- Iyo uva ku rugero ruto ujya ku rugero runini ukuraho zero (0) ibi bikorwa gusa ku mibare iherwa n'amazeru.

## Imyitozo



- a) dag 145 = g \_\_\_\_
- b) kg 9 g 8 = g \_\_\_\_
- c) g 7 800 = hg \_\_\_\_
- d) dag 600 = kg \_\_\_\_
- e) hg 7 g 72 = g \_\_\_\_
- f) kg 4 dag 65 = g \_\_\_\_

## 6.5 Kugereranya ingero z'uburemere

### A. Kugereranya ingero z'uburemere uterura

#### Igikorwa cya 1

Mwitegereze aya mashusho, muvuge ibyo muyabonaho.



#### Igikorwa cya 2

Muterure amabuye, amatafari, ibikapu by'amakayi, udukarito tw'ingwa, udukarito tw'amakayi n'utw'amakaramu. Uteruye ikintu age agereranya avuge uburemere bwacyo, mubiganireho.

#### Igikorwa cya 3

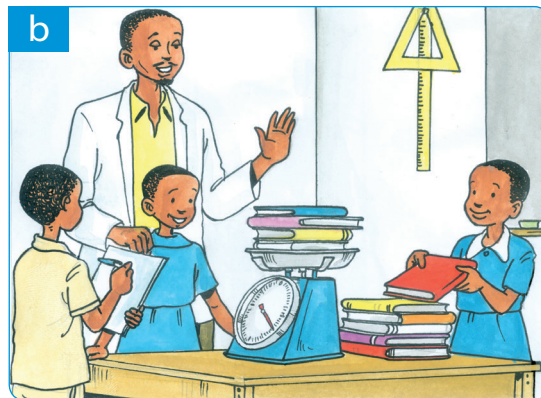
Muterure ibintu bitandukanye mugereranye uburemere bwabyo, mubishyire mu matsinda 2. Itsinda rya mbere rigemo ibihuje uburemere naho irya kabiri rigemo ibidahuje uburemere mubiganireho.



## B. Kugereranya ingero z'uburemere upima

### Igikorwa cya 1

Mwitegereze aya mashusho, muvuge ibyo muyabonaho.



### Igikorwa cya 2

Mukoreshe umunzani mupime uburemere bw'ibi bikurikira, mwandike uburemere bwabyo hanyuma mubugereranye.

- 1) Agakarito kuzuye ingwa n'akarimo ubusa
- 2) Ibitabo 5 by'imibare n'ibitabo 5 by'ikinyarwanda
- 3) Agakarito karimo utubuye n'akarimo ingwa

### Igikorwa cya 3

Mukoreshe umunzani upima uburemere bw'abantu buri wese yipime ibiro bye, yandike amazina ye n'ibiro yagize nimurangiza murebe ufite ibiro bike, ababinganya; n'ufite byinshi kubarusha.

## C. Kugereranya ingero z'uburemere ukoresheje $<$ , $>$ na $=$

### Igikorwa

Mwifashishije imbonerahamwe muhindure ingero z'uburemere mwahawe mu rugero ruto ruri mu zo mwahawe hanyuma mugereranye mukoresheje  $>$ ,  $<$  na  $=$

- a) kg 2  dag 2003      d) g 908  hg 9 g 8  
 b) hg 67  g 670      e) kg 5 dag 7  hg 75  
 c) dag 89  kg 8      f) dag 135  hg 12

### Nsobanukiwe ko:

- Iyo ugereranya ingero z'uburemere ubanza guhindura ingero zigereranywa mu rugero ruto mu ngero baguhaye.
- Ugakurikizaho kugereranya imibare.
- Ukabona gushyiramo ikimenyetso kimwe muri ibi bimenyetso by'igereranya ( $<$ ,  $>$  cyangwa  $=$ )

### Imyitozo

Gereranya ingero z'uburemere wahawe.

- a) kg 6 g 9  hg 69      d) g 479  hg 4 g 9  
 b) hg 78  dag 87      e) kg 8 dag 6  hg 86  
 c) dag 7 g 9  hg 9 g 7      f) hg 12  dag 129

## 6.6 Gutondeka ingero z'uburemere kuva kuri kg kugera kuri g

A. Gutondeka ingero z'uburemere uva ku rugero ruto ujya ku rugero runini

### Igikorwa

Mutondeke izi ngero z'uburemere muheraye ku rugero ruto mujya ku rugero runini mukurikije urugero mwahawe.

**Urugero:** kg 9, dag 8, dag 895, hg 79  
 → hg 79, dag 895, kg 9, dag 8

| kg | hg | dag | g |
|----|----|-----|---|
| 9  | 0  | 8   |   |
| 8  | 9  | 5   |   |
| 7  | 9  | 0   |   |

- a) dag 45, hg 79, g 530      d) hg 76, kg 4, dag 576  
 b) hg 52, dag 549, kg 9      e) dag 345, kg 8, hg 56  
 c) dag 79, g 310, hg 48      f) g 271, 54 dag, 9 kg

### Nsobanukiwe ko:

Iyo utondeka ingero z'uburemere uva ku rugero ruto ujya ku runini ubanza guhindura ingero zose baguhaye mu rugero ruto ruri mu zo baguhaye. Warangiza ugatondeka uva ku rugero ruto ujya ku rugero runini wifashishije imibare yazo.

## B. Gutondeka ingero z'uburemere uva ku rugero runini ujya ku rugero ruto

### Igikorwa

Mutondeke izi ngero z'uburemere muhereye ku rugero runini mujya ku rugero ruto mukurikije urugero mwahawe.

**Urugero:** dag 789, hg 85, g 497 → **hg 85 ,dag 789, g 497**

| kg | hg | dag | g |
|----|----|-----|---|
| 7  | 8  | 9   | 0 |
| 8  | 5  | 0   | 0 |
|    | 4  | 9   | 7 |

- a) g 791, kg 7, hg 65      c) dag 153, hg 68, kg 9  
 b) dag 24, g 869, kg 4      d) dag 64, kg 5, hg 245

### Nsobanukiwe ko:

Iyo utondeka ingero z'uburemere uva ku rugero runini ujya ku ruto ubanza guhindura ingero zose baguhaye mu rugero ruto ruri mu zo baguhaye. Warangiza ugatondeka uva ku rugero ruto ujya ku rugero runini wifashishije imibare yazo.



## Imyitozo



- 1) Tondeka izi ngero uhereye ku ruto ujya ku runini
  - a) dag 54, g 84, hg 6
  - b) hg 27, dag 45, kg 9
  - c) dag 87, g 58, hg 7
  - d) dag 96, g 97, kg 6
- 2) Tondeka izi ngero uhereye ku runini ujya ku ruto
  - a) g 897, hg 57, kg 5
  - b) dag 29, hg 18, g 47
  - c) g 538, dag 648, kg 7
  - d) hg 68, g 291, dag 164

## 6.7 Guteranya ingero z'uburemere kuva kuri kg kugera kuri g

### Igikorwa

Koresha imbonerahamwe y'ingero z'uburemere, usubize ibibazo ukurikije urugero wahawe.

Urugero:  $\text{kg } 4 \text{ g } 7 + \text{hg } 25 \text{ g } 3 = \text{dag } 651$

| kg  | hg | dag | g            |
|-----|----|-----|--------------|
|     |    | +1  |              |
| 4   | 0  | 0   | 7            |
| + 2 | 5  | 0   | 3            |
| 6   | 5  | 1   | <del>0</del> |

- a)  $\text{dag } 130 + \text{hg } 7 = \text{kg } \underline{\hspace{1cm}}$
- b)  $\text{hg } 56 + \text{dag } 40 = \text{kg } \underline{\hspace{1cm}}$
- c)  $\text{dag } 85 + \text{g } 7 \text{ } 150 = \text{hg } \underline{\hspace{1cm}}$
- d)  $\text{kg } 7 + \text{hg } 3 = \text{dag } \underline{\hspace{1cm}}$

### Nsobanukiwe ko:

Iyo uteranya ingero z'uburemere ubanza guhindura ingero zose baguhaye mu rugero wabajijwe ukabona guteranya.

## Imyitozo



Mukoreshe imbonerahamwe y'ingero z'uburebure mwuzuze urugero rubura muri buri mwitozo.

- a) g 52 + dag 75 = \_\_\_ 802      d) dag 195 + g 50 = \_\_\_ 2  
 b) dag 78 + g 220 = \_\_\_ 1      e) dag 73 + g 270 = \_\_\_ 10  
 c) kg 6 + dag 24 = \_\_\_ 624      f) hg 75 + dag 105 = \_\_\_ 855

## 6.8 Amahurizo yo guteranya ingero z'uburemere kuva kuri kg kugera kuri g

### Urugero:

Baho, Gaju, Teta na Gisa bagiye ku munzani basanga Baho afite kg 36, Gaju afite kg 33, Teta afite kg 35 naho Gisa afite kg 34. Bose hamwe ubashyize ku munzani bapima kg zingahe?

| Ibyo mfite                                                                   | Ibyo mbazwa             | Inzira n'igisubizo                                                     |
|------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------|
| Baho apima kg 36<br>Gaju apima kg 33<br>Teta apima kg 35<br>Gisa apima kg 34 | kg bose<br>hamwe bapima | Bose hamwe bapima<br>kg = kg 36 + kg 33<br>+ kg 35 + kg 34<br>= kg 138 |



### Nsuzuma ngusuzume

- 1) Masabo yaranguye kg 56 z'ifu y'amasaka, kg 195 z'ifu y'ingano kg 189 z'ifu y'uburo na kg 205 z'ifu ya sosoma. Niba yaravanze ayo mafu yose agakora ifu y'igikoma ivanze yagize kg zingahe?
- 2) Butera yasaruye hg 987 za kawa umwaka ushize naho uyu mwaka yasaruye dag 9 130. Ubwo yasaruye kg zingahe muri iyi myaka ibiri?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo guteranya ingero z'uburemere, ubanza kuvana mu ihurizo ibyo baguhaye n' ibyo bakubaza. Hanyuma ugateranya, ugahindura mu rugero bakubajije.



### Reka nisuzume



- 1) Ejo Uwamahoro yacuruje dag 975 z'umuceri naho uyu munsu yacuruje g 9 250. Shaka umubare wa kg yacuruje mu minsi ibiri.
- 2) Kamariza yajyanye na murumuna we Gatoni kurangura ubunyobwa, bagezeyo Kamariza arangura kg 375 naho murumuna we arangura hg 2 250. Bombi baranguye kg zingahe z'ubunyobwa?

### Imyitozo



- 1) Umucuruzi w'imyaka yaranguye hg 1 000 z'ibishyimbo, kg 50 z'isukari, kg 50 z'umuceri, kg 50 z'umunyu na dag 7 500 z'ubunyobwa. Shaka uburemere muri kg bw'ibintu byose yaranguye.
- 2) Nganji bamutumye guhaha agura g 500 z'umunyu, hg 10 z'inyama, dag 50 z'isukari, kg 2 z'inyanya, dag 300 z'ifu na hg 10 z'umuceri. Shaka uburemere bw'ibintu byose yahashye muri kg.

## 6.9 Gukuramo ingero z'uburemere kuva kuri kg kugera kuri g

### Igikorwa

Koresha imbonerahamwe yo guhindura ingero z'uburemere usubize ibibazo ukurikije urugero wahawe.

Urugero: dag 425 – kg 3 = dag 125

| kg  | hg | dag | g |
|-----|----|-----|---|
| 4   | 2  | 5   |   |
| – 3 | 0  | 0   |   |
| 1   | 2  | 5   |   |

- a) g 321 – dag 27 = g
- b) dag 756 – kg 5 hg 7 = dag
- c) hg 98 – dag 95 = g
- d) kg 7 dag 6 – g 2860 = hg
- e) dag 498 – hg 39 = g
- f) g 976 – hg 8 g 6 = dag

### Nsobanukiwe ko:

Iyo ukuramo ingero z'uburemere ubanza guhindura ingero zose baguhaye mu rugero wabajijwe warangiza ukabona gukuramo.

### Imyitozo



Mukoreshe imbonerahamwe yo guhindura ingero z'uburemere mwuzuze urugero rubura muri buri mwitozo.

- a) dag 825 – g 250 = \_\_\_ 8
- b) dag 972 – kg 9 = \_\_\_ 72
- c) g 760 – hg 5 = \_\_\_ 26
- d) dag 673 – hg 47 = \_\_\_ 203

## 6.10 Amahurizo yo gukuramo ingero z'uburemere kuva kuri kg kugera kuri g

### Urugero:

Niga mu mwaka wa kabiri napimaga kg 32 g 800. Ubu nsigaye mpima hg 390. Ubwo maze kwiyongeraho hg zingahe?

| Ibyo mfite                                          | Ibyo mbazwa          | Inzira n'igisubizo                              |
|-----------------------------------------------------|----------------------|-------------------------------------------------|
| 1) Niga mu wa kabiri napimaga kg 32 g 800 ni hg 328 | hg maze kwiyongeraho | hg maze kwiyongeraho ni hg 390 – hg 328 = hg 62 |
| 2) Ubu mfite hg 390                                 |                      |                                                 |



### Nsuzuma ngusuzume

- 1) Manzi yaranguye kg 65 z'isukari agurishaho hg 390. Ubwo yasigaranye kg zingahe?
- 2) Mu rugo twaguze umufuka w'umuceri wa kg 50 duhaho umuturanyi dag 1 200. Ubwo twasigaranye hg zingahe?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo gukuramo ingero z'uburemere ubanza kwerekana ibyo baguhaye n'ibyo bakubaza mu ihurizo. Ugahindura mu rugero wabajijwe, ukabona gukuramo.



### Reka nisuzume

- 1) Keza apima kg 39 akarusha murumuna we Mugeni kg 6. Ubwo Mugeni apima kg zingahe?
- 2) Umwaka ushize Mariza yapimaga kg 98. Aho atangiriye gufata indyo yihariye no gukora imyitozo ngororamubiri ubu asigaye apima kg 65. Ubwo yatakaje kg zingahe?

## Imyitozo



- 1) Usanase yaranguye kg 100 z'amasaka acuruzaho hg 380 mu gitondo na dag 4 500 nimugoroba. Yasigaranye kg zingahe?
- 2) Kayitare yahembwe hg 800 z'isukari avanaho dag 5 000 arazigurisha ngo yikenure isigaye ayijyana mu rugo. Ubwo yasigaranye kg zingahe?

## 6.11 Gukuba ingero z'uburemere kuva kuri kg kugera kuri g n'umubare ushyitse

### Igikorwa

Koresha imbonerahamwe yo guhindura ingero z'uburemere, usubize ibibazo ukurikije urugero wahawe.

**Urugero:** kg 2 dag 5  $\times$  4 = hg 82

| kg       | hg | dag          | g |
|----------|----|--------------|---|
| 2        | 0  | 5            |   |
| $\times$ |    | 4            |   |
| 8        | 2  | <del>0</del> |   |

- a) dag 275  $\times$  2 = hg \_\_\_\_
- b) g 125  $\times$  8 = kg \_\_\_\_
- c) g 225  $\times$  4 = hg \_\_\_\_
- d) g 184  $\times$  5 = dag \_\_\_\_
- e) dag 145  $\times$  6 = hg \_\_\_\_
- f) dag 34  $\times$  7 = g \_\_\_\_
- g) dag 45  $\times$  6 = hg \_\_\_\_
- h) g 138  $\times$  5 = dag \_\_\_\_

### Nsobanukiwe ko:

Iyo ukuba ingero z'uburemere n'umubare ushyitse ubanza guhindura ingero zose baguhaye mu rugero wabajijwe warangiza ukabona kukuba.



### Nsuzuma ngusuzume

Mukoreshe imbonerahamwe yo guhindura ingero z'uburemere, mwuzuze urugero rubura muri buri mwitozo.

- |                                                       |                                                           |
|-------------------------------------------------------|-----------------------------------------------------------|
| a) g $258 \times 5 = \underline{\hspace{1cm}}$ 129    | f) kg 4 dag $3 \times 3 = \underline{\hspace{1cm}}$ 1 209 |
| b) dag $265 \times 8 = \underline{\hspace{1cm}}$ 212  | g) dag $29 \times 7 = \underline{\hspace{1cm}}$ 203       |
| c) dag $725 \times 4 = \underline{\hspace{1cm}}$ 29   | h) g $450 \times 8 = \underline{\hspace{1cm}}$ 36         |
| d) g $815 \times 2 = \underline{\hspace{1cm}}$ 163    | i) kg $98 \times 5 = \underline{\hspace{1cm}}$ 490        |
| e) hg 4 g $5 \times 6 = \underline{\hspace{1cm}}$ 243 | j) hg $185 \times 6 = \underline{\hspace{1cm}}$ 111       |

## 6.12 Amahurizo yo gukuba ingero z'uburemere kuva kuri kg kugera kuri g

### Urugero:

Nziza yaguze amakarito 8 y'isabune. Niba buri karito yari ifite kg 25 ubwo ayo makarito yose yari afite uburemere bungana iki?

| Ibyo mfite                            | Ibyo mbazwa                 | Inzira n'igisubizo                                                     |
|---------------------------------------|-----------------------------|------------------------------------------------------------------------|
| 1) Umubare w'amakarito y'isabune ni 8 | Uburemere bw'amakarito yose | Uburemere bw'amakarito yose: $\text{kg } 25 \times 8 = \text{kg } 200$ |
| 2) Uburemere bwa buri karito ni kg 25 |                             |                                                                        |



### Nsuzuma ngusuzume

- 1) Niba ipaki imwe y'umunyu ipima g 500. Ubwo amapaki 9 y'uwo munyu apima hg zingahe?
- 2) Mu rugo duteka g 500 z'umuceri buri minsi. Ubwo mu minsi 8 tuba tumaze guteka kg zingahe?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo gukuba ingero z'uburemere n'umubare ushyitse, ubanza kwerekana ibyo baguhaye. Ugakurikizaho ibyo bakubaza, ugakuba ibyo baguhaye hanyuma igikubo ubonye ukagihindura mu rugero bakubajije



## Reka nisuzume



- 1) Mugabo yaguze amapaki 8 y'ifarini. Niba buri paki iba irimo kg 5, ubwo yaguze kg zingahe z'ifarini zose hamwe?
- 2) icyuma gitunganya umuceri gitonora kg 1 875 buri minsi. Ubwo gitonora kg zingahe mu minsi 4?

## Imyitozo



- 1) Mu minsi 2 uruganda rw'isukari ruzaba rukoze kg zingahe niba buri minsi rukora kg 2 750?
- 2) Muhizi yasaruye imifuka 9 y'umuceri ipima kg 100 buri mufuka. Ubwo yasaruye kg zingahe z'umuceri zose hamwe?

## 6.13 Kugabanya ingero z'uburemere kuva kuri kg kugera kuri g n'umubare ushyitse

### Igikorwa

Koresha imbonerahamwe y'ingero z'uburemere, ukore imyitozo ukurikije urugero wahawe.

#### Urugero:

$$\text{dag } 965 : 5 =$$

$$\begin{array}{r} 965 \\ - 5 \phantom{00} \\ \hline 46 \phantom{0} \\ - 45 \phantom{0} \\ \hline 15 \phantom{0} \\ - 15 \phantom{0} \\ \hline 00 \end{array}$$

193

dag 965 : 5 = dag 193 Ndabihindura muri g nifashishije imbonerahamwe:

| kg | hg | dag | g |
|----|----|-----|---|
| 1  | 9  | 3   | 0 |

$$\begin{aligned} \text{Ubwo dag } 965 : 5 &= \text{dag } 193 \\ &= \text{g } 1\,930 \end{aligned}$$

- a) hg 840 : 4 = hg \_\_\_\_ = kg \_\_\_\_
- b) dag 660 : 6 = hg \_\_\_\_
- c) g 620 : 2 = dag \_\_\_\_
- d) dag 550 : 5 = g \_\_\_\_



### Nsobanukiwe ko:

Iyo ugabanya ingero z'uburemere n'umubare ushyitse ubanza kugabanya, warangiza ugahindura mu rugero wabajijwe.

### Imyitozo



Mukoreshe imbonerahamwe y'ingero z'uburemere, mwuzuze urugero rubura muri buri mwitozo.

- a) dag 2 000 : 5 = \_\_\_ 4                      d) g 4 200 : 7 = \_\_\_ 6  
b) g 1 477 : 7 = \_\_\_ 211                      e) hg 6 g 8 : 4 = \_\_\_ 152  
c) g 2 080 : 8 = \_\_\_ 26                      f) kg 8 dag 40 : 6 = \_\_\_ 14

## 6.14 Amahurizo yo kugabanya ingero z'uburemere kuva kuri kg kugera kuri g n'umubare ushyitse

### Urugero:

Umucuruzi yaranguye kg 100 z'umuceri azigabanyiriza mu dufuka 4 ku buryo bungana. Ubwo buri gafuka yagashyizemo kg zingahe?

| Ibyo mfite                                              | Ibyo mbazwa                                     | Inzira n'igisubizo                                                    |
|---------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------|
| Umuceri waranguwe ni kg 100.<br>Umubare w'udufuka ni 4. | Uburemere bw'umuceri washyizwe muri buri gafuka | Uburemere bw'umuceri washyizwe muri buri gafuka ni kg 100 : 4 = kg 25 |



### Nsuzuma ngusuzume

- 1) Naranguye kg 75 z'isabune y'ifu nzigabanyiriza mu tudobo 5 ku buryo bungana. Muri buri kadobo nashyizemo kg zingahe?
- 2) Abantu 8 bishyize hamwe barangura kg 200 z'isukari bageze iwabo bayigabana ku buryo bungana. Ubwo buri muntu yatwaye kg zingahe?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo kugabanya ingero z'uburemere n'umubare ushyitse, ubanza kwerekana ibyo baguhaye. Ugakurikizaho ibyo bakubaza, ukagabanya ibyo baguhaye. Ikigabanyo ubonye ukagihindura mu rugero bakubajije.



### Reka nisuzume



- 1) Gabanya ku buryo bungana dag 9 600 z'imbutu y'ibirayi abahinzi 8. Buri wese uzamuha kg zingahe?
- 2) Ishyirahamwe ryahaye ku buryo bungana hg 720 z'ibishyimbo abanyamuryango baryo 9. Buri munyamuryango yahawe kg zingahe?
- 3) Shyira g 9 750 mu mapaki 5 angana. Buri paki uzashyiramo dag zingahe?
- 4) Gabanya ku buryo bungana hg 240 z'ubunyobwa abantu 8. Buri muntu uzamuha kg zingahe?

### Imyitozo

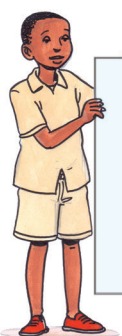


- 1) Shyira ku buryo bungana g 840 z'ifumbire mvaruganda ku ngemwe z'ibiti 7. Buri rugemwe uzarushyiraho ifumbire ingana ite?
- 2) Gabanya ku buryo bungana hg 4 000 z'imbutu y'ingano Imirenge 5. Buri Murenge uzawuha kg zingahe?
- 3) Shyira ku buryo bungana kg 8 mu dupaki dupima g 8 kamwekamwe. Uzashyira uwo muti mu dupaki tungahe?
- 4) Saranganya ku buryo bungana dag 1 200 z'umuceri abantu 6. Buri muntu uzamuha kg zingahe?

## 6.15 Isuzuma risoza umutwe wa 6

- 1) Hindura mu rugero wabajijwe
  - a)  $\text{kg } 8 \text{ g } 250 = \text{dag } \underline{\hspace{1cm}}$
  - b)  $\text{dag } 56 \text{ g } 9 = \text{g } \underline{\hspace{1cm}}$
  - d)  $\text{g } 7 \text{ } 800 = \text{hg } \underline{\hspace{1cm}}$
  - c)  $\text{kg } 6 \text{ g } 79 = \text{g } \underline{\hspace{1cm}}$
- 2) Koresha  $<$ ,  $>$  na  $=$  ugereranye izi ngero z'uburemere
  - a)  $\text{hg } 74 \text{ g } 59 \text{ } \underline{\hspace{1cm}} \text{ dag } 745$
  - b)  $\text{g } 798 \text{ } \underline{\hspace{1cm}} \text{ dag } 798$
- 3) Tondeka uhareye ku rugero ruto ujya ku runini  
 $\text{hg } 48$ ,  $\text{g } 487$ ,  $\text{dag } 487$
- 4) Tondeka uhareye ku rugero runini ujya ku ruto
  - a)  $\text{hg } 65$ ,  $\text{dag } 56 \text{ g } 8$ ,  $\text{kg } 6 \text{ g } 8$
  - b)  $\text{hg } 75$ ,  $\text{kg } 5 \text{ hg } 7$ ,  $\text{dag } 657$
- 5) Kora imyitozo ikurikira
  - a)  $\text{hg } 78 \text{ g } 70 + \text{g } 130 = \text{kg } \underline{\hspace{1cm}}$
  - b)  $\text{dag } 245 + \text{g } 6 \text{ } 550 = \text{hg } \underline{\hspace{1cm}}$
  - c)  $\text{dag } 87 - \text{hg } 7 \text{ dag } 8 = \text{dag } \underline{\hspace{1cm}}$
- 6) Kora aya mahurizo
  - a) Mugabe yaranguye  $\text{hg } 750$  z'ibishyimbo ku wa mbere, ku wa kabiri arangura  $\text{dag } 6 \text{ } 500$  naho ku wa gatatu arangura  $\text{kg } 60$ . Yaranguye  $\text{kg}$  zingahe muri iyo minsi itatu?
  - b) Ineza yaguze amapaki y'isukari 7. Niba buri paki yari irimo  $\text{kg } 5$  ubwo yaguze  $\text{hg}$  zingahe z'isukari?
  - c) Mu mpera z'umwaka ishyirahamwe ryahembye ku buryo bungana  $\text{hg } 1 \text{ } 000$  z'umuceri abanyamuryango baryo 4 bagize imyitwarire myiza. Buri wese yahawe  $\text{kg}$  zingahe?
  - d) Musinga yajyanye  $\text{dag } 857$  z'ubunyobwa ku isoko, agezeye agurishaho  $\text{g } 6 \text{ } 570$  ibisigaye abisubiza mu rugo. Ubwo yagurishije  $\text{kg}$  zingahe z'ubunyobwa?

# Ingero z'ibitembabuzi kuva kuri $l$ kugera kuri $ml$



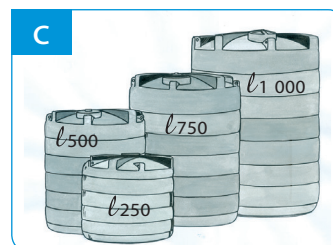
Mutuzo agemura ibicuba by'amata 15 ku munsu ku ikusanyirizo. Buri gicuba kijyamo litiro 20 z'amata. Nyuma y'iminsi 2 ntabwo aba azi ingano y'amata yagemuye. Ubwo akeneye gusobanukirwa iki mu mibare cyamufasha gukora akazi ke neza?



## 7.1 Ingero z'ibitembabuzi kuva kuri $l$ kugera kuri $ml$

### Igikorwa cya 1

Mwitegereze aya mashusho, muvuge ibyo muyabonaho.



### Igikorwa cya 2

Mukoreshe icupa rya  $ml$  500 cyangwa rya  $l$  1 mupime kandi mwandike ubunini bw'ibi bivomesho:

- Indobo ijyamo amacupa 10
- Ijerikani nini ijyamo amacupa 20

### Igikorwa cya 3

Mukoreshe akajerekani k'amazi ka  $l$  5 mupime kandi mwandike ubunini bw'ibi bivomesho:

- Ijerekani nini ijyamo utujerekani 4
- Ingunguru ijyamo utujerekani 20



## Reka nisuzume



Ni uruhe rugero mu ngero z'ibitembabuzi rukoreshwa iyo ushaka kumenya ibi bikurikira:

- Urugero rw'umuti w'amazi uha umwana
- Ingano y'ijerekani y'amazi

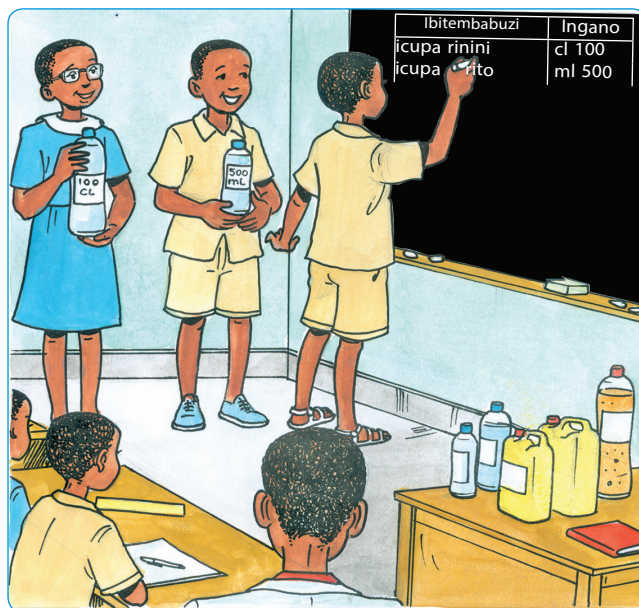
### Nsobanukiwe ko:

- Ingero z'ibitembabuzi zirimo
  - Litiro (l)
  - Desilitiro (dl)
  - Santilitiro (cl)
  - Militiro (ml)
- Litiro (l) ni rwo urugero fatizo mu ngero z'ibitembabuzi
- Desilitiro (dl), santilitiro (cl) na militiro (ml) ni zo ngero z'ibitembabuzi zirutwa na litiro.

## 7.2 Gusoma no kwandika ingero z'ibitembabuzi kuva kuri l kugeza kuri ml

### Igikorwa cya 1

Mwitegereze ishusho, musobanure ibiri gukorwa.



## Igikorwa cya 2

Mwitegereze imbonerahamwe y'ingero z'ibitembabuzi:

- Muganire uko basoma buri rugero.
- Mwandike uko basoma buri rugero mu makayi yanyu.

| Urugero fatizo mu ngero z'ibitembabuzi | Ingero z'ibitembabuzi zirutwa na litiro |                     |                    |
|----------------------------------------|-----------------------------------------|---------------------|--------------------|
| Litiro<br>(l)                          | Desilitiro<br>(dl)                      | Santilitiro<br>(cl) | Mililitiro<br>(ml) |

## 7.3 Isano iri hagati y'ingero z'ibitembabuzi kuva kuri l kugeza kuri ml

### Igikorwa

Mwitegereze imbonerahamwe y'ingero z'ibitembabuzi, musobanure uko zirutana hagati yazo.

|   |    |    |    |
|---|----|----|----|
| l | dl | cl | ml |
| 1 | 0  |    |    |
|   | 1  | 0  |    |
|   |    | 1  | 0  |

### Nsobanukiwe ko:

Ingero z'ibitembabuzi zirutana inshuro 10 uva ku rugero ruto ujya ku runini cyangwa uva ku runini ujya ku ruto.

### Imyitozo



Uzuza izi nteruro n'ijambo rikwiye: (desilitiro, santilitiro, litiro icumi, mililitiro, icupa rya litiro, ingero z'ibitembabuzi)

- \_\_\_ ni urugero fatizo mu ngero z'ibitembabuzi.
- Ingero z'ibitembabuzi zirutana inshuro \_\_\_.
- \_\_\_, \_\_\_ na \_\_\_ ni zo ngero z'ibitembabuzi zirutwa na litiro
- Iyo ushaka gupima amazi ari mu kajerekani ukoresha \_\_\_.
- \_\_\_ zifasha abacuruza ibitembabuzi kumenya ingano y'ibyo barangura cyangwa bacuruza.

## 7.4 Guhindura ingero z'ibitembabuzi kuva kuri $l$ kugera kuri $ml$

### A. Guhindura ingero z'ibitembabuzi uva ku rugero runini ujya ku rugero ruto

#### Igikorwa

Mwitegereze imbonerahamwe ikurikira y'ingero z'ibitembabuzi, muyigane mukore imyitozo ikurikira yo muri "Reka nisuzume".

| Urugero fatizo mu ngero z'ibitembabuzi | Ingero z'ibitembabuzi zirutwa na litiro |                      |                     |
|----------------------------------------|-----------------------------------------|----------------------|---------------------|
| Litiro ( $l$ )                         | Desilitiro ( $dl$ )                     | Santilitiro ( $cl$ ) | Mililitiro ( $ml$ ) |
| 1                                      | 0                                       |                      |                     |
| 1                                      | 0                                       | 0                    |                     |
| 1                                      | 0                                       | 0                    | 0                   |
|                                        | 1                                       | 0                    |                     |
|                                        | 1                                       | 0                    | 0                   |
|                                        |                                         | 1                    | 0                   |

#### Nsobanukiwe ko:

$$l \ 1 = dl \ 10$$

$$l \ 1 = cl \ 100$$

$$l \ 1 = ml \ 1000$$

$$dl \ 1 = cl \ 10$$

$$dl \ 1 = ml \ 100$$



#### Reka nisuzume

a)  $l \ 8 = dl \ \underline{\hspace{1cm}}$

b)  $dl \ 7 = cl \ \underline{\hspace{1cm}}$

c)  $cl \ 5 = ml \ \underline{\hspace{1cm}}$

d)  $l \ 92 = dl \ \underline{\hspace{1cm}}$

e)  $dl \ 94 = cl \ \underline{\hspace{1cm}}$

f)  $cl \ 39 = ml \ \underline{\hspace{1cm}}$

### B. Guhindura ingero z'ibitembabuzi uva ku rugero ruto ujya ku rugero runini

#### Igikorwa

Mwitegereze imbonerahamwe yo guhindura ingero z'ibitembabuzi, muyigane mukore imyitozo ikurikira yo muri "Nsuzuma ngusuzume".

| Urugero fatizo mu ngero z'ibitembabuzi | Ingero z'ibitembabuzi zirutwa na litiro |                  |                 |
|----------------------------------------|-----------------------------------------|------------------|-----------------|
| Litiro (l)                             | Desilitiro (dl)                         | Santilitiro (cl) | Mililitiro (ml) |
| 1                                      | <del>1</del>                            |                  |                 |
| 1                                      | <del>1</del>                            | <del>1</del>     |                 |
| 1                                      | <del>1</del>                            | <del>1</del>     | <del>1</del>    |
|                                        | 1                                       | <del>1</del>     |                 |
|                                        | 1                                       | <del>1</del>     | <del>1</del>    |
|                                        |                                         | 1                | <del>1</del>    |

### Nsobanukiwe ko:

- a)  $dl\ 10 = l\ 1$       c)  $ml\ 1\ 000 = l\ 1$       e)  $ml\ 100 = dl\ 1$   
b)  $cl\ 100 = l\ 1$       d)  $cl\ 10 = dl\ 1$       f)  $ml\ 10 = cl\ 1$



### Nsuzuma ngusuzume

- a)  $ml\ 90 = cl\ \underline{\hspace{1cm}}$       d)  $dl\ 60 = l\ \underline{\hspace{1cm}}$   
b)  $dl\ 800 = l\ \underline{\hspace{1cm}}$       e)  $ml\ 500 = dl\ \underline{\hspace{1cm}}$   
c)  $ml\ 7\ 000 = l\ \underline{\hspace{1cm}}$       f)  $dl\ 400 = l\ \underline{\hspace{1cm}}$

### Nsobanukiwe ko:

- Iyo uhindura ingero z'ibitembabuzi wifashisha imbonerahamwe y'ingero ukandikamo imibare wahawe
- Iyo uva ku rugero runini ujya ku rugero ruto wongeraho zero (0)
- Iyo uva ku rugero ruto ujya ku runini ukuraho zero (0). Ibi bikorwa ku mibare iherwa n'amazeru gusa.

### Imyitozo



Hindura mu rugero wabajijwe



- a)  $\text{cl } 400 = \text{l } \underline{\hspace{1cm}}$   
 b)  $\text{dl } 130 = \text{l } \underline{\hspace{1cm}}$   
 c)  $\text{dl } 56 \text{ cl } 8 = \text{ml } \underline{\hspace{1cm}}$

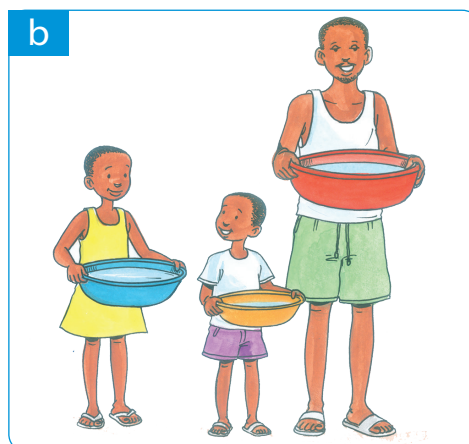
- d)  $\text{ml } 3500 = \text{cl } \underline{\hspace{1cm}}$   
 e)  $\text{dl } 4 \text{ ml } 9 = \text{ml } \underline{\hspace{1cm}}$   
 f)  $\text{l } 2 \text{ ml } 9 = \text{ml } \underline{\hspace{1cm}}$

## 7.5 Kugereranya ingero z'ibitembabuzi kuva kuri l kugera kuri ml

### a. Kugereranya ingero z'ibitembabuzi uterura

#### Igikorwa cya 1

Mwitegereze aya mashusho, muvuge ibyo muyabonaho.



#### Igikorwa cya 2

Muterure ibivomesho bitandukanye. Uteruye ikintu age agereranya abwire bagenzi be litiro z'amazi ateruye mubyandike hanyuma mubiganireho.

#### Igikorwa cya 3

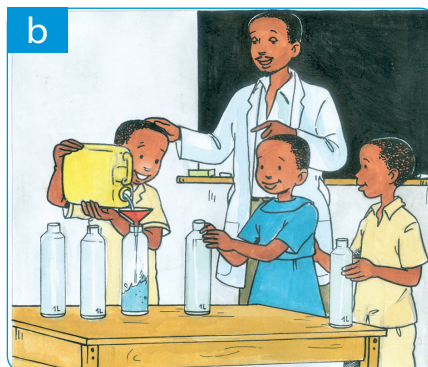
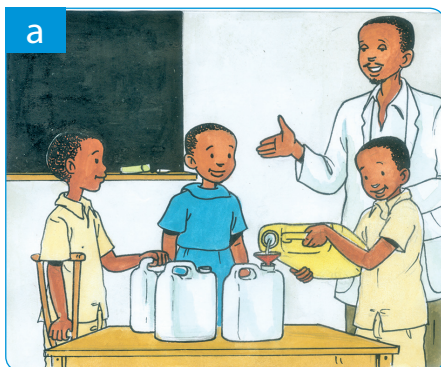
Mugereranye muvuge umubare w'ibirahuri byuzuye mwavana mu bintu bikurikira:

- $\text{ml } 500$  z'amazi
- $\text{l } 1$  y'amata
- $\text{l } 2$  z'umutobe

## b. Kugereranya ingero z'ibitembabuzi upima

### Igikorwa cya 1

Mwitegereze aya mashusho, muvuge ibyo muyabonaho.



### Igikorwa cya 2

Mukoreshe ijagi ya litiro (l) ndetse n'amazi ari mu ibase mupime maze mwandike ingano y'ibi bikurikira mubigereranye.

- Umubare w'amajagi y'amazi ajya mu kadobo
- Umubare w'amajagi y'amazi ajya mu kajerekani
- Umubare w'amajagi y'amazi ajya mu kabase

- Ni ikihe gikoresho gitwara amazi make?
- Ni ikihe gikoresho gitwara amazi menshi?
- Sobanura igisubizo watanze

## c. Kugereranya ingero z'ibitembabuzi ukoresheje $<$ , $>$ na $=$

### Igikorwa

Muhindure ingero mwifashishije imbonerahamwe y'ingero z'ibitembabuzi mwahawe muhindure mu rugero ruto hanyuma mugereranye mukoresheje  $>$ ,  $<$  na  $=$

- |                                           |                                         |
|-------------------------------------------|-----------------------------------------|
| a) l 8 d 7 <input type="text"/> dl 25 d 3 | d) ml 900 <input type="text"/> dl 9     |
| b) dl 67 <input type="text"/> d 670       | e) d 45 ml 7 <input type="text"/> dl 45 |
| c) dl 98 <input type="text"/> l 9         | f) d 593 <input type="text"/> dl 94     |

### Nsobanukiwe ko:

- Iyo ugereranya ingero z'ibitembabuzi ubanza guhindura ingero zigereranywa mu rugero ruto mu zo wahawe.
- Ukagereranya imibare
- Ugashyiramo kimwe muri ibi bimenyetso by'igereranya ( $<$ ,  $>$  cyangwa  $=$ )

### Imyitozo



Koresha  $>$ ,  $<$  na  $=$  ugereranye

- a)  $l\ 8\ ml\ 549$    $dl\ 85$       d)  $dl\ 987$    $l\ 9\ dl\ 7$   
b)  $dl\ 96$    $dl\ 960$       e)  $ml\ 890$    $dl\ 8\ dl\ 9$   
c)  $dl\ 3\ ml\ 7$    $l\ 9$       f)  $l\ 12\ dl\ 8$    $dl\ 129$

## 7.6 Gutondeka ingero z'ibitembabuzi kuva kuri $l$ kugera kuri $ml$

- a. Gutondeka ingero z'ibitembabuzi uva ku rugero ruto ujya ku rugero runini

### Igikorwa

Mutondeke izi ngero z'ibitembabuzi muhereye ku ruto mujya ku runini mukurikije urugero mwahawe

Urugero:  $l\ 6\ dl\ 9, dl\ 89, dl\ 465 \rightarrow dl\ 465, l\ 6\ dl\ 9, dl\ 89$

| $l$ | $dl$ | $dl$ | $ml$ |
|-----|------|------|------|
| 6   | 9    | 0    |      |
| 8   | 9    | 0    |      |
| 4   | 6    | 5    |      |

- a)  $dl\ 54, l\ 97, dl\ 305$       c)  $l\ 5, dl\ 94, dl\ 9\ ml\ 7$   
b)  $dl\ 75, l\ 87, dl\ 854$       d)  $dl\ 697, dl\ 4\ ml\ 9, l\ 8$



## Reka nisuzume



Tondeka ingero z'ibitembabuzi zikurikira uva ku ruto ujya ku runini:

- a) ml 597, l 9, dl 9
- b) dl 792, dl 67, ml 9
- c) dl 3, dl 89, dl 57
- d) l 5, dl 9, dl 8

### Nsobanukiwe ko:

Iyo utondeka ingero z'ibitembabuzi ubanza guhindura ingero zose baguhaye mu rugero ruto. Hanyuma ugatondeka uva ku rugero ruto ujya ku runini wifashishije imibare yazo.

## b. Gutondeka ingero z'ibitembabuzi uva ku rugero runini ujya ku rugero ruto

### Igikorwa

Mutondeke izi ngero z'ibitembabuzi muhereye ku runini mujya ku ruto mukurikije urugero mwahawe

### Urugero:

ml 7, l 4 dl 8, dl 9 dl 4 → l 4 dl 8, dl 9 dl 4, ml 7

| l | dl | dl | ml |
|---|----|----|----|
|   | 8  | 9  | 7  |
| 4 | 0  | 8  | 0  |
|   | 9  | 4  | 0  |

- a) dl 978, l 9, dl 856
- b) dl 68, dl 49, l 8
- c) dl 589, dl 59, l 5
- d) ml 746, dl 8, dl 67



## Reka nisuzume



Tondeka ingero z'ibitembabuzi zikurikira uva ku runini ujya ku ruto.

- a) l 9, dl 21, ml 935
- b) dl 5, ml 354, dl 95
- c) l 2, dl 74, dl 64
- d) dl 78, l 4, ml 987

### Nsobanukiwe ko:

Iyo utondeka ingero z'ibitembabuzi ubanza guhindura ingero zose baguhaye mu rugero ruto. Hanyuma ugatondeka uva ku rugero runini ujya ku ruto wifashishije imibare yazo.

### Imyitozo



- 1) Tondeka izi ngero z'ibitembabuzi uhereye ku rugero ruto ujya ku rugero runini
  - a) dl 95, cl 849, ml 697
  - b) ml 279, dl 96, cl 897
  - c) dl 87, cl 549, ml 879
  - d) dl 67, cl 748, ml 647
- 2) Tondeka izi ngero z'ibitembabuzi uhereye ku rugero runini ujya ku rugero ruto
  - a) cl 48, dl 95, ml 975
  - b) dl 49, l 8, cl 875
  - c) ml 958, dl 86, l 7
  - d) dl 98, cl 971, ml 624

## 7.7 Guteranya ingero z'ibitembabuzi kuva kuri l kugera kuri ml

### Igikorwa

Koresha imbonerahamwe yo guhindura ingero z'ibitembabuzi, usubize ibibazo ukurikije urugero wahawe.

**Urugero:** l 8 ml 5 + dl 19 ml 4 = ml 9 909

| l   | dl | cl | ml |
|-----|----|----|----|
| 8   | 0  | 0  | 5  |
| + 1 | 9  | 0  | 4  |
| 9   | 9  | 0  | 9  |

- a) dl 45 + l 3 = cl\_\_
- b) l 6 + ml 3 400 = ml\_\_
- c) cl 450 + ml 500 = cl\_\_
- d) dl 6 ml 6 + l 3 = ml\_\_



### Nsuzuma ngusuzume

a)  $\text{dl } 495 + \text{cl } 405 = \text{cl } \underline{\hspace{2cm}}$

c)  $\text{dl } 69 + \text{ml} = \text{ml} \underline{\hspace{2cm}}$

b)  $\text{cl } 87 + \text{ml } 530 = \text{ml} \underline{\hspace{2cm}}$

d)  $\text{ml } 970 + \text{cl } 83 = \text{ml} \underline{\hspace{2cm}}$

### Nsobanukiwe ko:

Iyo uteranya ingero z'ibitembabuzi, ubanza guhindura ingero zose baguhaye mu rugero wabajijwe. Warangiza ukabona guteranya.



### Reka nisuzume

Teranya ingero zikurikira maze wuzuze urugero rubura ahabugenewe.

a)  $\text{l } 6 + \text{dl } 7 = \underline{\hspace{2cm}} 67$

c)  $\text{cl } 80 + \text{dl } 32 = \underline{\hspace{2cm}} 4$

b)  $\text{cl } 77 + \text{ml } 30 = \underline{\hspace{2cm}} 8$

d)  $\text{dl } 36 + \text{cl } 40 = \underline{\hspace{2cm}} 4$

### Imyitozo

Teranya ingero zikurikira maze wuzuze urugero rubura ahabugenewe.

a)  $\text{l } 6 + \text{dl } 5 = \underline{\hspace{2cm}} 65$

c)  $\text{l } 5 + \text{dl } 8 = \underline{\hspace{2cm}} 58$

b)  $\text{cl } 845 + \text{ml } 550 = \underline{\hspace{2cm}} 9$

d)  $\text{dl } 25 + \text{cl } 750 = \underline{\hspace{2cm}} 10$

## 7.8 Amahurizo yo guteranya ingero z'ibitembabuzi kuva kuri $\text{l}$ kugera kuri $\text{ml}$

### Urugero:

Muhizi yaguze  $\text{l } 1$  y'umutobe w'amatunda,  $\text{cl } 500$  z'umutobe w'inanasi,  $\text{dl } 10$  z'umutobe w'amacunga, na  $\text{cl } 100$  z'amazi. Niba yaravanze iyo mitobe yose n'amazi ubwo yagize  $\text{l}$  zingahe z'umutobe uvanze?

| Ibyo mfite                                                                                                                                                                                 | Ibyo mbazwa                    | Inzira n'igisubizo                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>– ℓ 1 y'umutobe w'amatunda</li> <li>– ¢ 500 z'umutobe w'inanasi</li> <li>– ¢ 10 z'umutobe w'amacunga</li> <li>– ¢ 100 w'umutobe w'inkeri</li> </ul> | Ingano y'umutobe uvanze muri ℓ | Ingano y'umutobe uvanze:<br>$\ell 1 + \text{¢} 500 + \text{¢} 10 + \text{¢} 100 = \ell 8$ |



### Nsuzuma ngusuzume

- 1) Mu rugo dukama ℓ 42 z'amata mu gitondo na ¢ 4 800 nimugoroba. Ubwo dukama ℓ zingahe buri muni?
- 2) Ku wa mbere Butera yacuruje ¢ 450 z'amavuta naho ku wa kabiri acuruza ¢ 5 500. Ubwo yacuruje ℓ zingahe muri iyo minsi yombi?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo guteranya ingero z'ibitembabuzi, ubanza kwerekana ibyo baguhaye mu ihurizo. Ugakurikizaho ibyo bakubaza, ugahindura mu rugero wabajijwe ukabona gushaka igisubizo.



### Reka nisuzume

- 1) Uwera akoresha ℓ 75 z'amazi avomerera imboga ze mu gitondo naho nimugoroba agakoresha ¢ 550. Ubwo ku muni akoresha amazi angana iki avomerera imboga ze?
- 2) Shaka ingano ya litiro z'amazi dukoresha mu rugo buri muni niba dukora ibi bikurikira:
  - Guteka: ¢ 200
  - Koza ibyombo: ℓ 60
  - Gukoropa: ¢ 3 000
  - Gukaraba: ℓ 100

## Imyitozo



- 1) Ku muni w 'ikiruhuko Gatoni yameshe imyenda y'ishuri akoresha  $\text{dl } 200$ , mukuru we Mutoni akoresha  $\text{dl } 400$  naho ababyeyi babo bakoresha  $\text{l } 100$ . Ubwo urwo rugo rwameshesheje amazi angana iki?
- 2) Ku wa gatanu sitasiyo ya lisansi yacuruje  $\text{l } 658$  naho ku wa gatandatu icuruza  $\text{dl } 2\ 320$ . Shaka umubare wa  $\text{l}$  yacuruje muri iyo minsi ibiri.

## 7.9 Gukuramo ingero z'ibitembabuzi kuva kuri $\text{l}$ kugera kuri $\text{ml}$

### Igikorwa

Koresha imbonerahamwe y'ingero z'ibitembabuzi, usubize ibibazo ukurikije urugero wahawe.

**Urugero:**  $\text{dl } 789 - \text{l } 7\ \text{dl } 9 = \text{dl } 80 = \text{dl } 8$

| $\text{l}$   | $\text{dl}$ | $\text{dl}$ | $\text{ml}$ |
|--------------|-------------|-------------|-------------|
| 7            | 8           | 9           |             |
| - 7          | 0           | 9           |             |
| <del>0</del> | 8           | 0           |             |

- a)  $\text{dl } 321 - \text{dl } 3 = \text{dl } \underline{\hspace{1cm}}$
- b)  $\text{dl } 46 - \text{l } 2 = \text{dl } \underline{\hspace{1cm}}$
- c)  $\text{l } 8 - \text{dl } 75 = \text{dl } \underline{\hspace{1cm}}$
- d)  $\text{dl } 47\ \text{ml } 8 - \text{dl } 3 = \text{ml } \underline{\hspace{1cm}}$



**Nsuzuma ngusuzume**

- a)  $\text{dl } 89 - \text{dl } 795 = \text{ml } \underline{\hspace{1cm}}$
- b)  $\text{l } 37 - \text{dl } 295 = \text{dl } \underline{\hspace{1cm}}$
- c)  $\text{dl } 98 - \text{l } 7\ \text{dl } 80 = \text{dl } \underline{\hspace{1cm}}$
- d)  $\text{l } 7 - \text{dl } 58 = \text{ml } \underline{\hspace{1cm}}$



### Nsobanukiwe ko:

Iyo ukuramo ingero z'ibitembabuzi ubanza guhindura ingero zose baguhaye mu rugero wabajijwe.



### Reka nisuzume



a)  $\text{dl } 72 - \text{dl } 579 = \text{--- } 141$

c)  $\text{dl } 665 - \text{l } 6 = \text{--- } 65$

b)  $\text{l } 7 - \text{dl } 4 = \text{--- } 66$

d)  $\text{ml } 789 - \text{dl } 7 = \text{--- } 89$

### Imyitozo



a)  $\text{l } 4 - \text{dl } 98 = \text{--- } 302$

c)  $\text{dl } 56 - \text{dl } 5 = \text{--- } 6$

b)  $\text{dl } 6 - \text{dl } 6 = \text{--- } 54$

d)  $\text{ml } 98 - \text{dl } 6 = \text{--- } 38$

## 7.10 Amahurizo yo gukuramo ingero z'ibitembabuzi kuva kuri l kugera kuri ml

### Urugero:

Ingabire yari afite  $\text{dl } 100$  z'umutobe, ahaho inshuti ye Bugingo  $\text{dl } 30$ . Ubwo yasigaranye  $\text{dl}$  zingahe?

| Ibyo mfite                                                                                                                                                                                | Ibyo mbazwa                                   | Inzira n'igisubizo                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>– Umutobe wose ni <math>\text{dl } 100 = \text{ml } 1\,000</math></li><li>– Umutobe watanze ni <math>\text{dl } 3 = \text{ml } 300</math></li></ul> | Ingano y'umutobe yasigaranye muri $\text{ml}$ | Ingano y'umutobe yasigaranye:<br>$\text{dl } 100 - \text{dl } 30$<br>$= \text{ml } 1000 - \text{ml } 300$<br>$= \text{ml } 700$ |



### Nsuzuma ngusuzume

- 1) Mu ijerekani irimo  $\text{l } 20$  z'amazi bavanyeho  $\text{dl } 169$  barayatekesha. Ubwo muri iyo jerekani hasigayemo  $\text{dl}$  zingahe?

- 2) Ku munsu w'ibirori twateguye  $\text{dL}$  3 000 z'umutobe wo kuzimanira abashyitsi. Nyuma y'ibirori twasanze twasigaranye  $\text{L}$  40. Ubwo abo bashyitsi twabazimaniye  $\text{L}$  zingahe z'umutobe?

#### Nsobanukiwe ko:

Iyo ukora amahurizo yo gukuramo ingero z'ibitembabuzi ubanza kwerekana mu ihurizo ibyo baguhaye. Ugakurikizaho ibyo bakubaza, ugahindura mu rugero bakubajije, ugakuramo ibyo baguhaye.



#### Reka nisuzume

- 1) Navomye  $\text{L}$  60 z'amazi mesheshaho  $\text{dL}$  375. Ubwo nasigaranye  $\text{dL}$  zingahe?
- 2) Kugira ngo Mugabo abumbe amatafari azubakisha igikoni akeneye  $\text{L}$  225 z'amazi. Niba yaratangiye kuyavoma yageza kuri  $\text{dL}$  1 750 amazi akabura ubwo arabura amazi angana iki ngo abumbe ayo matafari?

#### Imyitozo

- 1) Mu rugo dukoresha  $\text{L}$  145 z'amazi buri munsu. Niba dufite  $\text{dL}$  950 gusa, ubwo turabura  $\text{L}$  zingahe kugira ngo tugire amazi ahagije ku munsu ukurikira?
- 2) Hirwa yavomye  $\text{dL}$  750 z'amazi azisuka mu ndobo ebyiri. Imwe yibagirwa kuyipfundikira ya mazi aratokorwa barayamena. Niba amazi bamennye yari  $\text{L}$  38 ubwo yasigaranye  $\text{L}$  zingahe?

## 7.11 Gukuba ingero z'ibitembabuzi kuva kuri $l$ kugera kuri $ml$ n'umubare ushyitse

### Igikorwa

Koresha imbonerahamwe yo guhindura ingero z'ibitembabuzi, usubize ibibazo ukurikije urugero wahawe.

Urugero:  $l\ 1\ dl\ 80 \times 5 = dl\ \underline{\hspace{1cm}}$

|          | $l$ | $dl$ | $cl$         | $ml$ |
|----------|-----|------|--------------|------|
|          | 1   | 0    |              |      |
| +        |     | 8    | <del>0</del> |      |
|          | 1   | 8    |              |      |
| $\times$ |     | 5    |              |      |
|          | 9   | 0    |              |      |

$$l\ 1\ dl\ 80 \times 5 = dl\ 90$$

a)  $dl\ 895 \times 4 = l\ \underline{\hspace{1cm}}$

c)  $ml\ 755 \times 8 = cl\ \underline{\hspace{1cm}}$

b)  $cl\ 472 \times 5 = cl\ \underline{\hspace{1cm}}$

d)  $dl\ 65 \times 6 = l\ \underline{\hspace{1cm}}$



### Nsuzuma ngusuzume

a)  $dl\ 654 \times 7 = dl\ \underline{\hspace{1cm}}$

c)  $l\ 55 \times 3 = l\ \underline{\hspace{1cm}}$

b)  $cl\ 565 \times 2 = dl\ \underline{\hspace{1cm}}$

d)  $ml\ 825 \times 8 = dl\ \underline{\hspace{1cm}}$

### Nsobanukiwe ko:

Iyo ukuba ingero z'ibitembabuzi ubanza guhindura ingero zose baguhaye mu rugero wabajijwe warangiza ukabona gukuba.



### Reka nisuzume

a)  $dl\ 895 \times 4 = l\ \underline{\hspace{1cm}}$

c)  $ml\ 755 \times 8 = cl\ \underline{\hspace{1cm}}$

b)  $cl\ 472 \times 5 = dl\ \underline{\hspace{1cm}}$

d)  $dl\ 65 \times 6 = l\ \underline{\hspace{1cm}}$

## Imyitozo



Uzuza:

- a)  $\text{dℓ } 654 \times 9 = \text{dℓ } \underline{\hspace{2cm}}$
- b)  $\text{dℓ } 565 \times 8 = \text{dℓ } \underline{\hspace{2cm}}$
- c)  $\text{ℓ } 185 \times 4 = \text{ℓ } \underline{\hspace{2cm}}$
- d)  $\text{dℓ } 125 \times 8 = \text{ℓ } \underline{\hspace{2cm}}$

## 7.12 Amahurizo yo gukuba ingero z'ibitembabuzi n'umubare ushyitse

Urugero:

Gatesi anywa  $\text{mℓ } 2500$  z'amazi buri munsu. Shaka umubare wa  $\text{ℓ}$  z'amazi anywa mu minsi 2.

| Ibyo mfite                                           | Ibyo mbazwa                                | Inzira n'igisubizo                                                                                              |
|------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Amazi Gatesi anywa buri munsu ni $\text{mℓ } 2\,500$ | Ingano y'amazi Gatesi anywa mu minsi ibiri | Ingano y'amazi Gatesi anywa mu munsu ibiri: $\text{mℓ } 2\,500 \times 2$<br>$= \text{mℓ } 5\,000 = \text{ℓ } 5$ |



Nsuzuma ngusuzume

- 1) Ireme yavomye inshuro 4 avomesha ijerekani ya  $\text{ℓ } 15$ . Ubwo yavomye amazi angana iki yose hamwe?
- 2) Inka ya Gashumba ikamwa  $\text{ℓ } 32$  buri munsu. Shaka ingano y'amata iyo nka ikamwa mu minsi 5.

Nsobanukiwe ko:

Iyo ukora amahurizo yo gukuba ingero z'ibitembabuzi ubanza kwerekana ibyo baguhaye mu ihurizo. Ugakurikizaho ibyo bakubaza, ugakuba ibyo baguhaye. Hanyuma igikubo ubonye ukagihindura mu rugero bakubajije.



## Reka nisuzume



- 1) Mu rugo turi abantu 8. Niba buri wese anywa  $\text{dl } 500$  z'amata buri muni, twese tunywa amata angana iki?
- 2) Shaka ingano ya lisansi Uwineza akoresha mu minsi 6 niba buri muni akoresha  $\text{dl } 750$ .

## Imyitozo



- 1) Shaka  $\text{l}$  z'amazi Uwingabire akoresha mu minsi 6 niba buri muni akoresha  $\text{dl } 250$ .
- 2) Buri munyeshuri anywa uducupa 3 twa  $\text{dl } 50$  tw'amazi. Abanyeshuri 9 mu minsi 2 banywa amazi angana iki?

## 7.13 Kugabanya ingero z'ibitembabuzi kuva kuri $\text{l}$ kugera kuri $\text{ml}$

### Igikorwa cya 1

Itgereze urugero, usobanure ibyakozwe.

Urugero:

$$\text{dl } 468 : 6 = \text{dl } \underline{\hspace{1cm}}$$

$$\begin{array}{r} 4680 \\ - 42 \phantom{00} \\ \hline 048 \\ - 48 \phantom{00} \\ \hline 000 \\ - 0 \phantom{00} \\ \hline 0 \end{array}$$

780

|   | $\text{l}$ | $\text{dl}$ | $\text{cl}$ | $\text{ml}$ |
|---|------------|-------------|-------------|-------------|
| 4 | 6          | 8           | 0           |             |

$$\text{dl } 4680 : 6 = \text{dl } 780$$

### Igikorwa cya 2

Koresha imbonerahamwe yo guhindura ingero z'ibitembabuzi usubize ibibazo ukurikije urugero wahawe mu gikorwa cya 1.

- a)  $\text{ml } 1800 : 9 = \text{dl } \underline{\hspace{1cm}}$
- b)  $\text{dl } 680 : 8 = \text{ml } \underline{\hspace{1cm}}$
- c)  $\text{dl } 1484 : 7 = \text{dl } \underline{\hspace{1cm}}$
- d)  $\text{l } 7890 : 6 = \text{l } \underline{\hspace{1cm}}$



### Nsuzuma ngusuzume

a)  $\text{dl } 6\ 900 : 5 = \text{l } \underline{\hspace{2cm}}$

b)  $\text{dl } 7\ 280 : 4 = \text{l } \underline{\hspace{2cm}}$

c)  $\text{cl } 86\ \text{ml } 4 : 3 = \text{ml } \underline{\hspace{2cm}}$

d)  $\text{ml } 4\ 640 : 2 = \text{cl } \underline{\hspace{2cm}}$

### Nsobanukiwe ko:

Iyo ugabanya ingero z'ibitembabuzi ubanza guhindura ingero zose baguhaye mu rugero wabajijwe warangiza ukabona kugabanya.



### Reka nisuzume

a)  $\text{l } 4\ \text{cl } 8 : 2 = \underline{\hspace{2cm}}\ 204$

b)  $\text{dl } 1\ 830 : 3 = \underline{\hspace{2cm}}\ 61$

c)  $\text{cl } 2\ 460 : 4 = \underline{\hspace{2cm}}\ 6\ 150$

d)  $\text{ml } 8\ 965 : 5 = \underline{\hspace{2cm}}\ 1\ 793$

### Imyitozo

a)  $\text{ml } 6960 : 6 = \underline{\hspace{2cm}}\ 116$

b)  $\text{dl } 9\ \text{ml } 80 : 7 = \underline{\hspace{2cm}}\ 14$

c)  $\text{cl } 48\ \text{ml } 8 : 8 = \underline{\hspace{2cm}}\ 61$

d)  $\text{dl } 63\ \text{ml } 90 : 9 = \underline{\hspace{2cm}}\ 71$

## 7.14 Amahurizo yo kugabanya ingero z'ibitembabuzi n'umubare ushyitse

### Urugero:

Wakoresha utujerekani tungahe tujyamo  $\text{l } 3$  z'amazi kugira ngo wuzuze ingunguru ijyamo  $\text{l } 225$  z'amazi?

| Ibyo mfite                                                                                                                                                                      | Ibyo mbazwa           | Inzira n'igisubizo                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Ingano y'akajerekani kamwe ni <math>\text{l } 3</math></li> <li>Ingano y'ingunguru yuzuye amazi ni <math>\text{l } 225</math></li> </ul> | Umubare w'utujerekani | Umubare w'utujerekani<br>$= 225 : 3 = 75$<br>$= \text{Utujerekani } 75$ |



### Nsuzuma ngusuzume

- 1) Mu ijerekani ya  $\text{dl}$  500 z'amazi wakuramo utujerekani tungahe tujyamo  $\text{l}$  5 kamwekamwe?
- 2) Gabanya ku buryo bungana  $\text{dl}$  800 z'umutobe abana 8. Buri wese uzamuha  $\text{l}$  zingahe?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo kugabanya ingero z'ibitembabuzi ubanza kwerekana ibyo baguhaye mu ihurizo, ugakurikizaho ibyo bakubaza, ukagabanya ibyo baguhaye hanyuma ikigabanyo ubonye ukagihindura mu rugero bakubajijwe.



### Reka nisuzume

- 1) Gabanya ku buryo bungana  $\text{dl}$  450 z'amavuta ingo 9. Buri rugo uzaruha  $\text{dl}$  zingahe?
- 2) Muhoza ateka  $\text{l}$  4 z'amavuta mu minsi 8. Shaka  $\text{dl}$  z'amavuta ateka buri muni.

### Imyitozo

- 1) Gabanya ku buryo bungana  $\text{dl}$  900 z'amazi abana 9. Buri mwana uzamuha  $\text{l}$  zingahe?
- 2) Kamariza arashaka kugabanya ku buryo bungana  $\text{dl}$  56 z'amata abana be 7. Buri mwana azamuha  $\text{dl}$  zingahe?

## 7.15 Isuzuma risoza umutwe wa 7

- 1) Hindura mu rugero wabajijwe
  - a)  $l\ 4 = dl\ \_\_\_\_\_\_$
  - b)  $dl\ 65 = ml\ \_\_\_\_\_\_$
  - c)  $ml\ 7\ 500 = dl\ \_\_\_\_\_\_$
  - d)  $l\ 7\ dl\ 79 = dl\ \_\_\_\_\_\_$
- 2) Koresha  $<, >$  na = ugereranye izi ngero z'ibitembabuzi.
  - a)  $dl\ 79\ \boxed{\phantom{000}}\ ml\ 7\ 908$
  - b)  $dl\ 27\ \boxed{\phantom{000}}\ dl\ 16$
  - c)  $l\ 9\ \boxed{\phantom{000}}\ dl\ 79$
  - d)  $dl\ 546\ \boxed{\phantom{000}}\ l\ 7$
- 3) Tondeka uhareye ku rugero ruto ujya ku runini  
 $dl\ 72, dl\ 807, l\ 9$
- 4) Tondeka uhareye ku rugero runini ujya ku ruto
  - a)  $dl\ 75, l\ 7\ dl\ 7, dl\ 3\ ml\ 6$
  - b)  $dl\ 46, l\ 9\ dl\ 15, ml\ 234$
- 5) Kora imyitozo ikurikira
  - a)  $dl\ 45\ ml\ 7 + dl\ 367 = ml\ \_\_\_\_\_\_$
  - b)  $ml\ 375 \times 8 = l\ \_\_\_\_\_\_$
  - c)  $l\ 5\ ml\ 7 + dl\ 43 = ml\ \_\_\_\_\_\_$
  - d)  $dl\ 693 : 7 = ml\ \_\_\_\_\_\_$
- 6) Amahurizo
  - a) Navomye  $l\ 69$  naho mukuru wange avoma  $dl\ 950$ . Yandushije  $dl$  zingahe?
  - b) Resitora ikoresha  $dl\ 225$  z'amavuta buri munsu. Shaka  $l$  z'amavuta ikoresha mu minsu 8.
  - c) Nasutse  $l\ 67$  z'amazi mu ngunguru mukuru wange asukamo  $dl\ 1\ 330$ . Ubwo twembi twasutsemo  $l$  zingahe?
  - d) Gabanya ku buryo bungana  $dl\ 7\ 500$  za lisansi imodoka 5. Buri modoka uzayishyiramo  $l$  zingahe za lisansi?
  - e) Abana 5 ba Ineza banywa  $ml\ 850$  z'amata umwumwe buri munsu. Shaka  $dl$  z'amata banywa buri munsu.



Umutwe wa

8

# Amafaranga y'u Rwanda kuva ku F 1 kugera ku F 5 000



Kanani baramuhembye. Ashaka kuvunjisha atanga inoti 2 zitukura. Bamuha inoti 10 ziriho abana bakoresha mudasobwa. Kanani agenda yishimye cyane azi ko abonye amafaranga menshi. Kanani akeneye gusobanukirwa iki mu mibare? Wamugira iyihe nama?



## 8.1 Ibiranga amafaranga y'u Rwanda n'agaciro kayo kugera ku F 5 000

### Igikorwa cya 1

Mwitegereze ibiceri bigize F y'u Rwanda muvuge agaciro kabyo ndetse n'ibibiranga



### Nsobanukiwe ko:

Ibiceri by'amafaranga y'u Rwanda birangwa n'ibikurikira:

| Igiceri cya F 1  |                    |
|------------------|--------------------|
| Uruhande rumwe   | Urundi ruhande     |
| – Ibara rya feza | – Ibara rya feza   |
| – Ikirangantego  | – Ihundo ry'ingano |
| – Umubare 1      |                    |

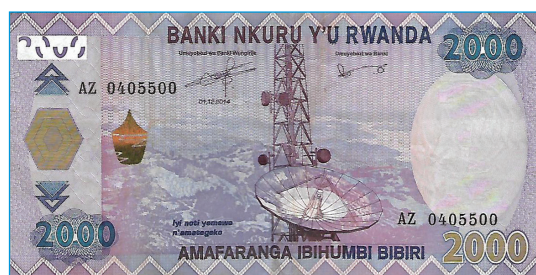
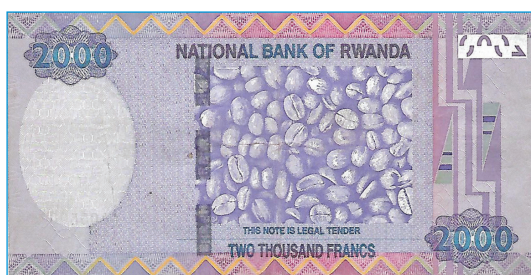
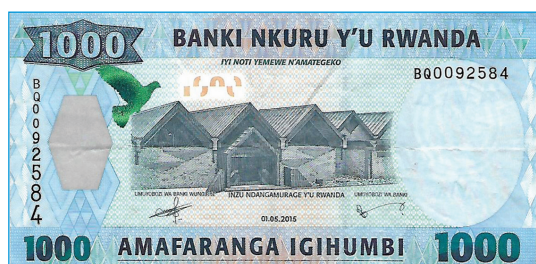
| Igiceri cya F 5                                                                                                                              |                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Uruhande rumwe                                                                                                                               | Urundi ruhande                                                                                                                              |
| <ul style="list-style-type: none"> <li>– Ibara ry’umuringa</li> <li>– Ikirangantego</li> <li>– Umubare 5</li> </ul>                          | <ul style="list-style-type: none"> <li>– Ibara ry’umuringa</li> <li>– Ikawa</li> </ul>                                                      |
| Igiceri cya F 10                                                                                                                             |                                                                                                                                             |
| Uruhande rumwe                                                                                                                               | Urundi ruhande                                                                                                                              |
| <ul style="list-style-type: none"> <li>– Ibara ry’umuringa</li> <li>– Ikirangantego</li> <li>– Umubare 10</li> </ul>                         | <ul style="list-style-type: none"> <li>– Ibara ry’umuringa</li> <li>– Insina iriho igitoki</li> </ul>                                       |
| Igiceri cya F 20                                                                                                                             |                                                                                                                                             |
| Uruhande rumwe                                                                                                                               | Urundi ruhande                                                                                                                              |
| <ul style="list-style-type: none"> <li>– Ibara rya feza</li> <li>– Ikirangantego</li> <li>– Umubare 20</li> </ul>                            | <ul style="list-style-type: none"> <li>– Ibara rya feza</li> <li>– Ishami ry’igiti k’icyayi.</li> </ul>                                     |
| Igiceri cya F 50                                                                                                                             |                                                                                                                                             |
| Uruhande rumwe                                                                                                                               | Urundi ruhande                                                                                                                              |
| <ul style="list-style-type: none"> <li>– Ibara rya feza</li> <li>– Ikirangantego</li> <li>– Umubare 50</li> </ul>                            | <ul style="list-style-type: none"> <li>– Ibara rya feza</li> <li>– Ikigori</li> </ul>                                                       |
| Igiceri cya F 100                                                                                                                            |                                                                                                                                             |
| Uruhande rumwe                                                                                                                               | Urundi ruhande                                                                                                                              |
| <ul style="list-style-type: none"> <li>– Ibara rya feza rizengurutse iry’umuringa</li> <li>– Ikirangantego</li> <li>– Umubare 100</li> </ul> | <ul style="list-style-type: none"> <li>– Ibara rya feza rizengurutse iry’umuringa</li> <li>– Agaciro k’igiceri cy’amafaranga 100</li> </ul> |

## Igikorwa cya 2

Mwitegereze ibiceri bigize amafaranga y’u Rwanda, mutahure ikirango kiboneka ku biceri byose.

## Igikorwa cy'a 3

Mwitegereze inoti zigize F y'u Rwanda, muvuge agaciro kazo n'ibiziranga.



### Nsobanukiwe ko:

- Inoti zigize amafaranga y'u Rwanda ari 4 zifite agaciro gakurikira F 500, F 1 000, F 2 000 na F 5 000.
- Inoti ifite agaciro gato ni iya F 500.
- Inoti ifite agaciro kanini ni iya F 5 000.
- Ibiranga inoti z'amafaranga y'u Rwanda ari ibi:

| Inoti ya F 500                                                                                                                                                                                                                                         |                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Uruhande rumwe                                                                                                                                                                                                                                         | Urundi ruhande                                                                                                                                                                 |
| <ul style="list-style-type: none"> <li>– Ikirangantego cya Leta y'u Rwanda</li> <li>– Ibara ry'ubururu bukeye</li> <li>– Inka ebyiri</li> </ul>                                                                                                        | <ul style="list-style-type: none"> <li>– Ikirangantego cya Leta y'u Rwanda</li> <li>– Ibara ry'ubururu bukeye</li> <li>– Abana bane bakoresha mudasobwa</li> </ul>             |
| Inoti ya F 1 000                                                                                                                                                                                                                                       |                                                                                                                                                                                |
| Uruhande rumwe                                                                                                                                                                                                                                         | Urundi ruhande                                                                                                                                                                 |
| <ul style="list-style-type: none"> <li>– Ikirangantego cya Leta y'u Rwanda</li> <li>– Ibara ry'ubururu</li> <li>– Inzu ndangamurage y'u Rwanda ihagazeho inuma</li> </ul>                                                                              | <ul style="list-style-type: none"> <li>– Ikirangantego cya Leta y'u Rwanda</li> <li>– Ibara ry'ubururu</li> <li>– Inkende</li> </ul>                                           |
| Inoti ya F 2 000                                                                                                                                                                                                                                       |                                                                                                                                                                                |
| Uruhande rumwe                                                                                                                                                                                                                                         | Urundi ruhande                                                                                                                                                                 |
| <ul style="list-style-type: none"> <li>– Ikirangantego cya Leta y'u Rwanda</li> <li>– Umunara wubatse ku kirunga cya Kalisimbi</li> <li>– Ibara ry'umwura</li> <li>– Udutako dukoze muri mpandeshatu n'impande esheshatu</li> <li>– Agaseke</li> </ul> | <ul style="list-style-type: none"> <li>– Ikirangantego cya Leta y'u Rwanda</li> <li>– Ikawa zumye zitonoye</li> <li>– Agatako ka nyamuraza</li> </ul>                          |
| Inoti ya F 5 000                                                                                                                                                                                                                                       |                                                                                                                                                                                |
| Uruhande rumwe                                                                                                                                                                                                                                         | Urundi ruhande                                                                                                                                                                 |
| <ul style="list-style-type: none"> <li>– Ingagi iri mu migano</li> <li>– Ibara ry'umutuku</li> <li>– Ikirangantego cya Leta y'u Rwanda</li> </ul>                                                                                                      | <ul style="list-style-type: none"> <li>– Inkangara n'agaseke</li> <li>– Agatako k'inyegamo</li> <li>– Ibara ry'umutuku</li> <li>– Ikirangantego cya Leta y'u Rwanda</li> </ul> |



## Igikorwa cya 4

Mwitegereze inoti zigize amafaranga y'u Rwanda maze mutahure ikirango kiboneka ku noti zose.



Nsuzuma ngusuzume

Itegereze inoti n'ibiceri bigize amafaranga y'u Rwanda, utahure ikirango kiboneka hose haba ku noti ndetse no ku biceri.

## Imyitozo



- 1) Ibiceri byose bigize amafaranga y'u Rwanda biri mu mabara abiri. Yavuge.
- 2) Sobanura itandukaniro riri hagati y'ibiceri n'inoti
- 3) Vuga muri make iby'ingenzi biranga inoti zigize amafaranga y'u Rwanda.

## 8.2 Akamaro k'amafaranga

### Igikorwa cya 1

Mwitegereze amashusho, muvuge ibyo muyabonaho.



### Igikorwa cya 2

Usibye ibyo mwabonye ku mashusho, muvuge akandi kamaro muzi k'amafaranga.



Nsuzuma ngusuzume

Mukore urutonde rw'ibyo mwakora mufite amafaranga 1 000.

### Nsobanukiwe ko:

- Amafaranga tuyagura ibyo dukeneye byose nk'ibiribwa, ibinyobwa n'imyambaro. Amafaranga tuyishyura serivisi zitandukanye nk'ubwishingizi bw'ubuzima, umutekano, isuku, ibyangombwa ndetse n'abadukoreye akazi.
- Amafaranga kandi tuyagura imitungo itandukanye nk'inzu, ubutaka, amatungo, imodoka n'ibikoresho bitandukanye.

### Igikorwa cya 3

Muganire ku bibazo bikurikira buri wese atange igitekerezo hanyuma muze guhitamo ibitekerezo 5 byiza kurusha ibindi

- a) Ufite F 2 000 wayagura iki?
- b) Ufite F 5 000 wayagura iki?

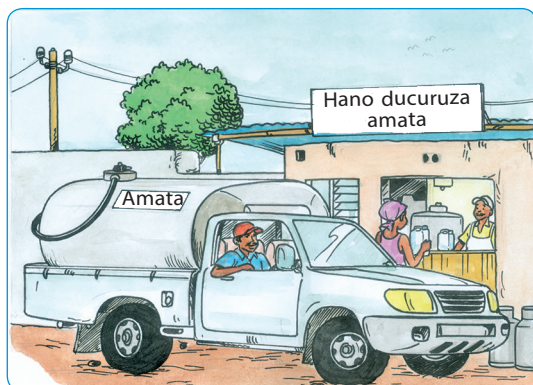
### Imyitozo

- 1) Tanga ingero za serivisi zishyurwa amafaranga.
- 2) Sobanura akamaro k'amafaranga ku muryango wawe.

## 8.3 Uko amafaranga aboneka

### Igikorwa cya 1

Mwitegereze amashusho, muvuge ibyo muyabonaho.





## Nsuzuma ngusuzume

Vuga ubundi buryo butagaragaye ku mashusho umuntu yabonamo amafaranga.

### Nsobanukiwe ko:

Abantu bavana amafaranga mu mirimo ikurikira:

- Ubuhinzi
- Ubucuruzi
- Ubwikorezi
- Ubukorikori
- Imirimo yo mu biro
- Ubworozi
- Ubukerarugendo
- Amarushanwa

## Igikorwa cya 2

Musobanure uko imiryango yanyu ibona amafaranga.



### Reka nisuzume

Wakora iki kugira ngo ubone amafaranga wunganire umuryango wawe kugira ngo ubone ibyo ukeneye?

## Igikorwa cya 3

Muganire ku buryo buboneye bwo gukoresha amafaranga

### Imyitozo

- 1) Tanga ingero z'imirimo iwanyu bakora ibazanira amafaranga.
- 2) Vuga zimwe mu ngeso mbi tugomba kwirinda zishobora gutuma uzikora abona amafaranga.

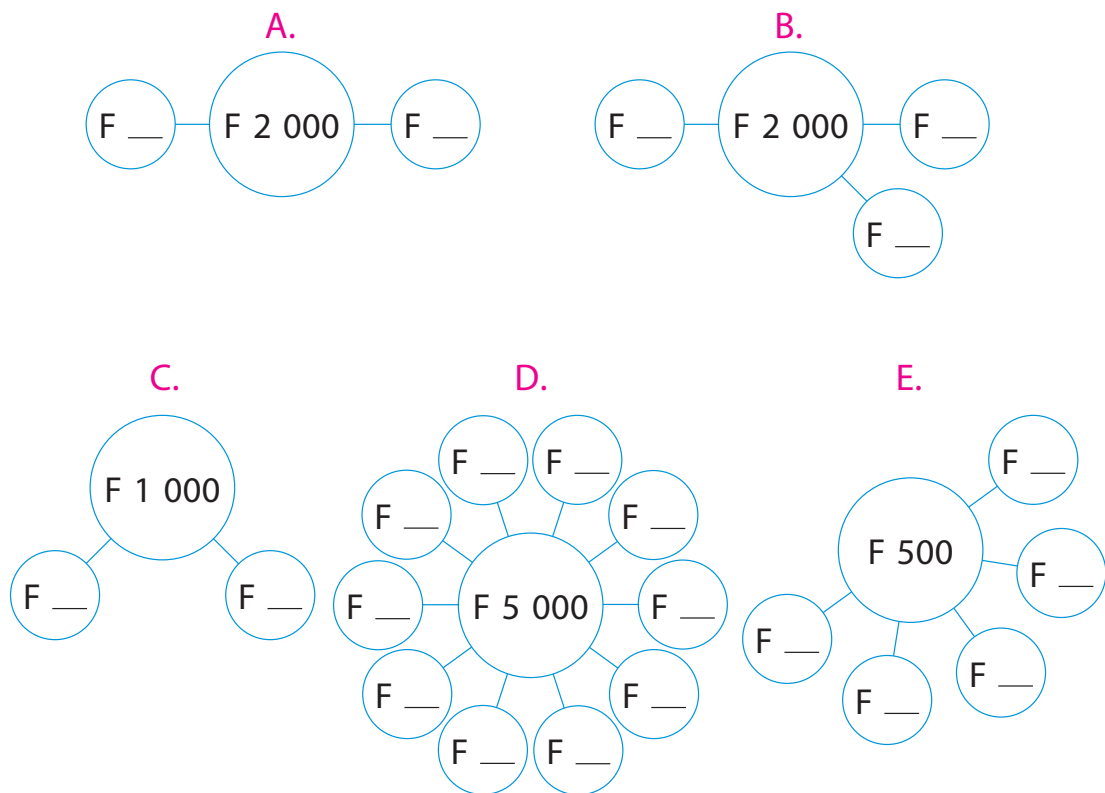
## 8.4 Kuvunja amafaranga y'u Rwanda

### Imyitozo

- 1) Mwifashishe ibiceri n'inoti mukore iyi myitozo
  - a) Inoti ya F 1 000 = Inoti ya F \_\_\_\_ + Inoti ya F \_\_\_\_

- b) Inoti ya F 2 000 = Inoti ya F \_\_\_\_ + Inoti ya F \_\_\_\_
- c) Inoti ya F 2 000 = Inoti ya F \_\_\_\_ + Inoti ya F \_\_\_\_
- d) Inoti ya F 5 000 = Inoti ya F \_\_\_\_ + Inoti ya F \_\_\_\_ + Inoti ya F \_\_\_\_
- e) Inoti ya F 5 000 = Inoti ya F \_\_\_\_ + Inoti ya F \_\_\_\_ + Inoti ya F \_\_\_\_ + Inoti ya F \_\_\_\_ + Inoti ya F \_\_\_\_

2) Mwuzuze ahabugenewe n'amafaranga abura.



3) Uzuza n'amafaranga akwiye

- a) F 3 000 = F 1 000 + F 1 000 + F \_\_\_\_
- b) F 4 000 = F 2 000 + F 1 000 + F 500 + F \_\_\_\_
- c) F 2 000 = F 1 000 + F \_\_\_\_ + F 500
- d) F 5 000 = F 1 000 + F 2 000 + F \_\_\_\_ + F 1 000
- e) F 3 500 = F 2 000 + F \_\_\_\_ + F 1 000



## 8.5 Amahurizo yo kuvunja amafaranga y'u Rwanda

### Urugero:

Munezero bamuhembye inoti 3 za F 1 000 n'izindi 2 za F 500. Ubwo bamuhembye F angahe yose hamwe?

| Ibyo mfite                             | Ibyo mbazwa             | Inzira n'igisubizo                                                                                                                                                                                           |
|----------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inoti 3 za F 1 000<br>Inoti 2 za F 500 | Umubare wa F bamuhembye | F bamuhembye<br>$\text{inoti } 3 \times \text{F } 1\,000 = \text{F } 3\,000$<br>$\text{inoti } 2 \times \text{F } 500 = \text{F } 1\,000$<br>$= \text{F } 3\,000 + \text{F } 1\,000$<br>$= \text{F } 4\,000$ |



### Nsuzuma ngusuzume

- 1) Rugira yatanze inoti 2 za F 2 000 n'izindi noti 2 za F500 bamuha umupira wo kwifubika. Ubwo uwo mupira wo kwifubika yawuguze F angahe?
- 2) Naguze ikayi nini n'ikaramu nishyura inoti 2 za F 1 000 n'indi imwe ya F 500. Ubwo nabiguze F angahe?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo kuvunja amafaranga ubanza kwerekana ibyo baguhaye mu ihurizo. Ugakurikizaho ibyo bakubaza, ugakuba umubare w'inoti cyangwa ibiceri n'agaciro kabyo. Hanyuma ugateranya ibikubo ubonye kugira ngo ubone igisubizo.



### Reka nisuzume

- 1) Nagiye kwa masenge mu biruhuko ngiye kuvayo ampa inoti 3 za F 1 000 n'inoti 1 ya F 2 000. Ubwo masenge yampaye F angahe?
- 2) Mugabo yishyuye Uwera ibiceri 4 bya F 100 n'inoti 8 za F 500. Ubwo yari amurimo F angahe?

## Imyitozo



- 1) Mu rugo twaguze inkoko twishyura inoti 2 za F 2 000 n'inoti 3 za F 500. Ubwo twayiguze F angahe?
- 2) Iranzi yahembwe inoti 1 ya F 2 000, inoti 2 za F 500 n'inoti 2 za F 1 000. Shaka umubare wa F Iranzi yahembwe.



Nsuzuma ngusuzume

Vuga umubare w'inoti cyangwa ibiceri wakwishyura kugira ngo ugure ibintu bikurikira batakugaruriye:

- a) Kg 1 y'isukari ku F 1 200
- b) Imiti 2 y'isabune ku F 900
- c) I 1 y'amavuta ku F 1 800
- d) Igitabo ku F 4 500
- e) Ishati ku F 2 500
- f) Inkweto ku F 3 500

## 8.6 Amahurizo yo guteranya amafaranga y'u Rwanda

### Urugero:

Tunga yaguze igitabo ku F 3500 n' amakayi ku F 1 200. Byose yabiguze F angahe?

| Ibyo mfite                                                    | Ibyo mbazwa      | Inzira n'igisubizo                                       |
|---------------------------------------------------------------|------------------|----------------------------------------------------------|
| Igiciro k'igitabo ni F 3 500<br>Igiciro cy'amakayi ni F 1 200 | F yabiguze byose | Byose yabiguze<br>$F = F 3 500 + F 1 200$<br>$= F 4 700$ |



Nsuzuma ngusuzume

- 1) Rukundo yaguze ishati ku F 1 500 bamugarurira F 500. Ubwo yari yishyuye F angahe?

- 2) Ishimwe yaguze igikapu cyo gutwaramo ibitabo ku F 3 500 n'amakaramu ya F 900. Byose yabiguze F angahe?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo guteranya amafaranga ubanza kwerekana ibyo baguhaye mu ihurizo. Ugakurikizaho ibyo bakubaza. Hanyuma ugateranya ibyo baguhaye kugira ngo ubone igisubizo.



### Reka nisuzume

- 1) Mutabazi yahaye abana be 4 ari bo Ingabire, Gato, Mucyo na Bwiza amafaranga yo kugura ibikoresho by'ishuri ku buryo bukurikira:
- Ingabire yamuhaye F 750
  - Gato yamuhaye F 1 450
  - Mucyo yamuhaye F 1 150
  - Bwiza yamuhaye F 950
- Bose hamwe yabahaye F angahe?
- 2) Ku muni w'isabukuru y'amavuko yange banguriye ishata ya F 1 500, isengeri ya F 500, ipantaro ya F 2 000 n'inkweto zo kogeramo za F 1 000. Byose hamwe babiguze F angahe?

### Imyitozo

- 1) Naguze irangi ku F 2 500 na I 1 ya peteroli yo kurivanga ku F 970. Byose hamwe nabiguze F angahe?
- 2) Uwamahoro yampembye ibisuguti bigura F 1 200, bombo za F 500 n'umutobe w'imbuta wa F 800. Shaka agaciro k'ibihembo byose nahembwe.
- 3) Abaturanyi ba Mbabazi bamutwerereye umwe F 3 400 naho undi F 1 300. Bombi bamutwerereye F angahe?

## 8.7 Amahurizo yo gukuramo amafaranga y'u Rwanda

### Urugero:

Uwingabire yari afite F 5 000 aguraho kg 1 y'inyama ku F 2 500 na I 1 y'amavuta ku F 1 900. Yasigaranye F angahe?

| Ibyo mfite                       | Ibyo mbazwa                | Inzira n'igisubizo                                                |
|----------------------------------|----------------------------|-------------------------------------------------------------------|
| 1) Umubare wa F yose ni F 5 000  | – Ayo Byose hamwe yabiguze | Byose hamwe yabiguze:<br>$F\ 2\ 500 + F\ 1\ 900$<br>$= F\ 4\ 400$ |
| 2) Igiciro k'inyama ni F 2 500   | – Ayo yasigaranye          | Yasigaranye:<br>$F\ 5\ 000 - F\ 4\ 400$<br>$= F\ 600$             |
| 3) Igiciro cy'amavuta ni F 1 900 |                            |                                                                   |



### Nsuzuma ngusuzume

- 1) Kangabe yari afite inoti ya F 1 000 aguraho kg 1 y'umunyu ku F 400 n'umuti umwe w'isabune ku F 450. Bamugaruriye F angahe?
- 2) Uwitonze afite F 4 500 kandi arashaka kugura ipantaro igura F 5 000. Ubwo arabura F angahe?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo gukuramo amafaranga ubanza kwerekana ibyo baguhaye mu ihurizo, ugakurikizaho ibyo bakubaza ugakuramo ibyo baguhaye.



### Reka nisuzume

- 1) Kaneza bamutumye kugura indobo nini yo gushyiramo amazi bamuha F 5 000. Agezeyo yishyuye bamugarurira F 900. Ubwo iyo indobo yayiguze F angahe?
- 2) Nagiye guhaha mfite F 4 500. Ngeze mu isoko mpahisha F 3 900. Ubwo nasigaranye F angahe?

## Imyitozo



- 1) Mwarimu yagiye kugura ingwa za F 3 750 maze yishyura inoti ya F 5 000. Bamugaruriye F angahe?
- 2) Ku munsu w'amanota nabaye uwa mbere data ampemba F 5 000 ngo nzayagure icyo nshaka maze njyana na mama mu iguriro ry'ibitabo angurira igitabo k'imibare ku F 3 900. Ubwo nasigaranye F angahe?

## 8.8 Amahurizo yo gukuba amafaranga y'u Rwanda n'umubare ushyitse

### Urugero:

Kabayiza yaguzwe amagi 56 ku F 80 rimwerimwe. Yose hamwe yayaguzwe F angahe?

| Ibyo mfite                                                 | Ibyo mbazwa          | Inzira n'igisubizo                                   |
|------------------------------------------------------------|----------------------|------------------------------------------------------|
| 1. Umubare w'amagi ni 56<br>2. Igiciro k'igi rimwe ni F 80 | F yaguzwe amagi yose | F yaguzwe amagi yose:<br>$56 \times F 80 = F 4\,480$ |



### Nsuzuma ngusuzume

- 1) Uwagutuma guhaha wakwishyura F angahe kuri buri bicuruzwa bikurikira:
  - a) kg 4 z'isukari ku F 1 200 buri kg 1
  - b) l 2 z'amavuta ku F 1 800 buri l 1
  - c) Imiti y'isabune 8 ku F 500 umuti umwe
  - d) Amaseri 2 y'ibitoki ku F 1 700 iseri rimwe
  - e) kg 4 z'umuceri ku F 1 250 kg imwe.
- 2) Niba igi rimwe rirangurwa F 85, ubwo amagi 27 arangurwa F angahe?



## Reka nisuzume



- 1) Marume yaguze amagi 119 ku F 80 igi rimwe. Ubwo yose yayaguze F angahe?
- 2) Niba ikayi imwe igura F 250 ubwo amakayi 8 agura F angahe?
- 3) Ngiye kugura I 3 z'amavuta nsanga imwe bayigura F1400 maze nishyuye bangarurira F 800. Ubwo nagiye kuyagura mfite F angahe?

## Imyitozo



- 1) Niba m 1 y'ijyora igura F 1 600, ubwo m 6 z'iryo jyora zigura F angahe?
- 2) Gicanda yaguze fanta 12 ku F 350 icupa rimwe. Shaka umubare wa F yishyuye yose hamwe.
- 3) Umutoza w'ikipe afite abakinnyi 18. Yaguriye buri mukinnyi icupa ry'umutobe. Niba icupa rimwe ry'umutobe rigura F 250 ubwo yishyuye F angahe yose hamwe?

## 8.9 Amahurizo yo kugabanya amafaranga y'u Rwanda n'umubare ushyitse

### Urugero:

Muhoza yari afite F 5 000 aguramo kg 8 z'ibishyimbo. Shaka ikiguzi cya kg imwe y'ibishyimbo.

| Ibyo mfite                                   | Ibyo mbazwa     | Inzira n'igisubizo                          |
|----------------------------------------------|-----------------|---------------------------------------------|
| 1) Ingano y'ibishyimbo byagurishijwe ni kg 8 | Igicro cya kg 1 | Igicro cya kg 1<br>= F 5 000 : 8<br>= F 625 |
| 2) Amafaraanga yaguze ibishyimbo ni F 5 000  |                 |                                             |



### Nsuzuma ngusuzume

- 1) Gabanya ku buryo bungana F 4 800 abakozi 4. Buri wese uzamuha F angahe?
- 2) Gahima yahembye abana be 5 ku buryo bungana. Buri wese yamuhembye F angahe niba yarakoresheje F 4 500?

### Nsobanukiwe ko:

Iyo ukora amahurizo yo kugabanya amafaranga ubanza kwerekana ibyo baguhaye mu ihurizo. Ugakurikizaho ibyo bakubaza. Hanyuma ukagabanya ibyo baguhaye kugira ngo ubone igisubizo.



### Reka nisuzume

- 1) Naguze amakaye 4 ku F 4 400. Ubwo buri kaye nayiguze ku F angahe?
- 2) Abayede 3 bahembwe F 3 900 yo kugabana ku buryo bungana. Ubwo buri muyede yahawe F angahe?

### Imyitozo

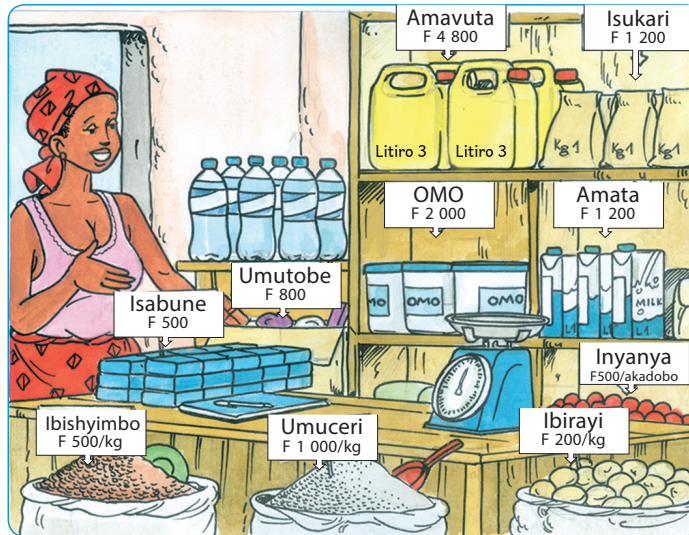


- 1) Umuganwa yaguze amacupa 9 y'umutobe w'ibitoki ku F 4 500. Buri cupa ry'umutobe w'ibitoki yariguze ku F angahe?
- 2) Karangwa yacuruje kg 7 z'umuceri ku F 4 900. Ubwo kg 1 y'umuceri yayigurishaga ku F angahe?
- 3) Niba ℓ 5 z'amata zigura F 2 250 ubwo ℓ 1 igura F angahe?
- 4) Amacupa 9 ya fanta agura F 2 250. Ubwo icupa rimwe rigura F angahe?

## 8.10 Kugura no kugurisha

### Igikorwa

Mwitegereze ibicuruzwa biri muri iri duka maze mukore imyitozo.



- 1) Shaka igiciro cy'amacupa 5 y'umutobe.
- 2) Bagutumye  $\ell$  3 z'amavuta na  $\ell$  1 y'amata wakwishyura F angahe?
- 3) Shaka F Mahame yishyuye niba yaraguze kg 2 z'isukari n'imiti 4 y'isabune.
- 4) Nagiye kugura akadobo 1 ka omo n'ibiro 4 by'ibishyimbo bangarurira F 1 000. Ubwo nari nishyuye F angahe?
- 5) Twagiye gusura umuvandimwe tumushyira amacupa 3 y'umutobe, agakarito 1 k'amata na kg 1 y'isukari. Ubwo twishyuye F angahe?

## 8.11 Akamaro ko kuzigama

### Igikorwa cya 1

Musome inkuru ikurikira nimurangiza musubize ibibazo.

Ababyeyi ba Hirwa bamuhaye ibibazo by'imibare, maze bamusezeranya ko nabikora byose atibeshye bamuhemba



F 2 000. Arabikora, bamukosoye basanga yabikoze byose kandi neza. Birabashimisha bamuha igihembo ke. Nyirarume na nyirasenge bari aho na bo birabashimisha buri wese amuhemba F 1 000. Ayabika mu gasanduku kari gafatanye n'igitanda ke. Hashize iminsi abwira ababyeyi be ko ashaka kugura inkoko 2 akazorora. Baramwemerera bamufasha kuzihitamo arazigura arazorora. Hashize umwaka amaze kugira inkokokazi 12 n'amasake 8. Ababyeyi be baje kurwara amafaranga yose bari bafite bayivuzamo. Igihe cy'amashuri kigeze Hirwa abura ibikoresho by'ishuri. Asaba nyirarume ko yajyana amasake 6 ku isoko akayagurisha akamugurira ibikoresho by'ishuri maze amafaranga asigara akayaguramo ibyo kondora ababyeyi be bari barazahajwe n'indwara.

Ibibazo ku nkuru

- 1) Kugira ngo Hirwa agire inkokokazi 12 n'amasake 8 yahereye ku nkoko zingahe?
- 2) Amafaranga yatangiye yayakuye he? Ni angahe?
- 3) Kugira ngo Hirwa agire inkokokazi 12 n'amasake 8 byamufashe igihe kingana iki?
- 4) Hirwa abuze ibikoresho by'ishuri yabigenje ate?
- 5) Ni iki Hirwa yafashije ababyeyi be mu gihe bari barwaye?
- 6) Ni irihe somo uvanye muri iyi nkuru?
- 7) Hari inkuru isa n'iyi waba warumvise? Yibwire bagenzi bawe.
- 8) Nyuma yo gusoma iyi nkuru ufashe uwuhe mugambi?

## Igikorwa cya 2

Buri wese asobanurire abandi uko umuryango we wizigamira.

### Nsobanukiwe ko:

Kuzigama ari umuco mwiza kuko ibyo uzigamye bikugoboka. Kuzigama bituma umuntu agira ikerekezo gifite intego. Uzigama uteganyiriza igihe kizaza ugamije kuziteza imbere.

### Igikorwa cya 3

Garagaza ibyo wakora baguhaye amafaranga 5 000 kugira ngo uzigamire igihe kizaza.

## 8.12 Udushinga duciriritse twunguka

### Igikorwa cya 1

Musome urutonde rw'udushinga duciriritse twunguka dukurikira maze muhitemo utwunguka kurusha utundi mubisobanure.

- 1) Guhumba ibishyimbo mu mirima iwacu bamaze gusaruramo ibyo mvanyemo nkabigurisha F 3 000 nkaguramo inkoko nkayorora.
- 2) Kubika amafaranga 2 000 bampaye nk'impano nkazayaguramo agakwavu nakorora.
- 3) Kwiharika akarima k'imboga nka karoti n'amashu umusaruro mvanyemo nkawugurisha F 4 000.
- 4) Gukora ibikinisho nkajya mbigurisha n'abana babishaka. Igikinisho kimwe nakigurisha F 100.
- 5) Gutera igiti k'imbutu cy'avoka cyazera nkazajya nsoroma avoka nkazigurisha. Amafaranga nkuyemo nkayagura ibikoresho by'ishuri.

### Igikorwa cya 2

Mufatanye gushaka utundi dushinga duciriritse twunguka mwakora ku rwego rwanyu tutabonetse mu rutonde rwo mu gikorwa cya 1.

#### Nsobanukiwe ko:

Buri wese afite ubushobozi bwo gukora agashinga gaciriritse kunguka kamufasha kubona ibyo akeneye byose no kwiteza imbere.



## Nsuzuma ngusuzume

Tegura agashinga gaciriritse kunguka ugiye gukora.  
Gararagaza uko uzagakora n'ibyo uteganya kunguka muri ako gashinga.

### 8.13 Isuzuma risoza umutwe wa 8

- 1) Uzuza n'amafaranga abura
  - a)  $F\ 5\ 000 = F\ 2\ 000 + F\ \_\_\_ + \text{Inoti 2 za } F\ 500$
  - b)  $F\ 2\ 000 = \text{Ibiceri 10 bya } F\ 100 + F\ \_\_\_$
- 2) Itegereze indangabiciro yo mu iduka rya Butera usubize.

| Igicuruzwa | Igiciro        | Igicuruzwa | Igiciro     |
|------------|----------------|------------|-------------|
| Umugati    | F 1000         | Amata      | ℓ 1 = F 500 |
| Umuceri    | kg 1 ni F 1100 | Ubunyobwa  | kg 1 = 1300 |
| Isukari    | kg 1 ni F 1200 | Ubuto      | ℓ 1 = 2000  |
| Ibishyimbo | kg 1 ni F 500  | Isababune  | F 500       |

- a) Uguze umugati, ℓ 1 y'amata, na ℓ 1 y'ubuto wakwishyura F angahe?
  - b) Munezero afite F 5 000 kandi arashaka guhaha kg 6 z'ibishyimbo, ℓ 1 y'ubuto na kg 2 z'isukari. Ubwo arabura F angahe?
  - c) Ireme yaguze kg 1 y'umuceri, kg 1 y'isukari na kg 2 z'ubunyobwa bamugarurira F 100. Ubwo yari yagiye guhaha afite F angahe?
  - d) Uguze igicuruzwa kimwekimwe kuri buri bicuruzwa by'ibitembabuzi kuri iyi ndangabiciro wakwishyura F angahe?
- 3) Gabanya ku buryo bungana F 4 800 abakozi 4. Buri wese uzamuha F angahe?
- 4) Muhoza bamuhaye F 3 500 ngo age kugura ikanzu agezeyo asanga igura F 5 000. Ubwo yaburaga F angahe ngo ayigire?

## Ingero z'igihe



Gapasi iteka ategura amafunguro mbere cyane y'uko abakoresha be bajya mu kiruhuko cya saa sita. Kandi ntajya amenya itariki ukwezi kwe kurangirira. Ahembesha igihe kitaragera cyangwa cyararenze. Ubwo Gapasi akeneye gusobanukirwa iki mu mibare?

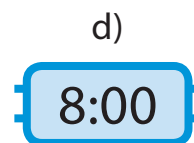
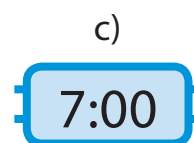
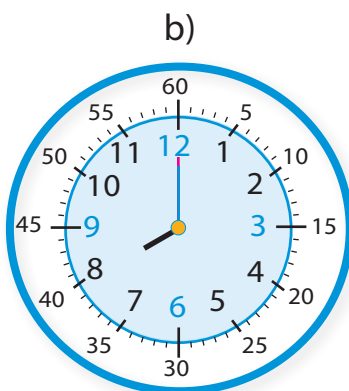
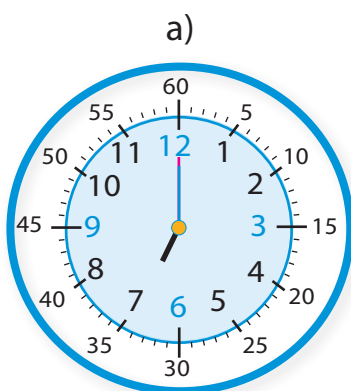


## 9.1 Gusoma ukavuga igihe kerekanwa n'isaha

## A. Isaha yuzuye

## Igikorwa cya 1

Mwitegereze amasaha, muvuge igihe yerekana:



## Nsobanukiwe ko:

## 1. Isaha y'inshinge

Isaha iba yuzuye iyo urushinge rugufi rubara amasaha ruri ku mubare uwo ari wo wose uri mu isaha naho urushinge rurerure rubara iminota n'agashinge karekare cyane kabara amasegonda bihuriye ku mubare 12.

## 2. Isaha y'imibare

Umubare uhagarariye amasaha ukurikirwa n'utudomo tubiri hanyuma hakaza amazeru abiri.



Nsuzuma ngusuzume

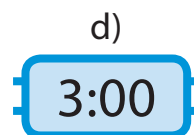
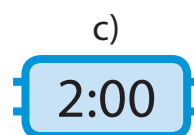
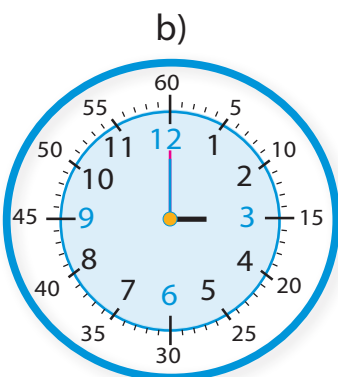
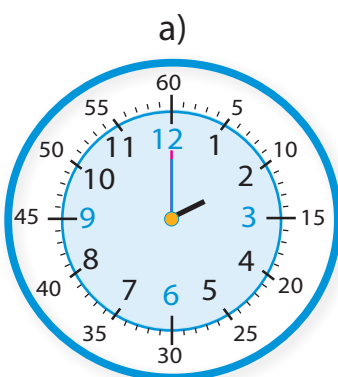
Shushanya isaha y'inshinge n'iy'imibare ibara:

a) Saa saba

b) Saa tanu

Imyitozo

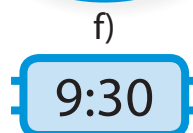
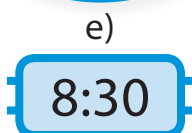
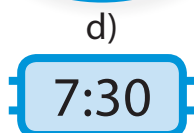
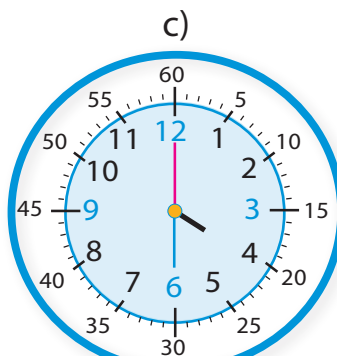
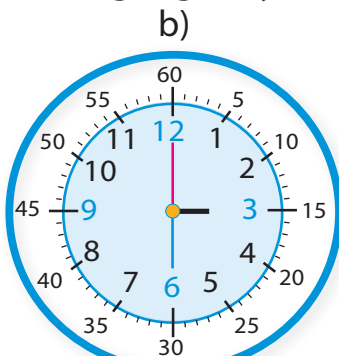
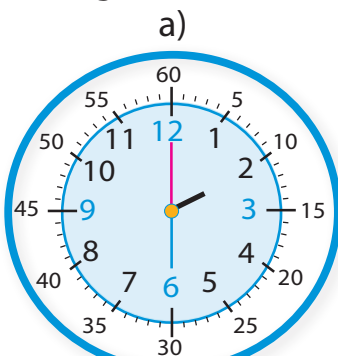
Itegereze amasaha uvuge igihe



## B. Isaha irengaho iminota 30

Igikorwa

Mwitegereze amasaha muvuge igihe yerekana:



### Nsobanukiwe ko:

#### 1. Isaha y'inshinge

Isaha iba irengaho iminota mirongo itatu iyo urushinge rubara amasaha ruri hagati y'imibare 2 iri mu isaha naho urushinge rurerure rubara iminota ruri ku mubare 6.

Usoma umubare ubanziriza urushinge rubara amasaha ukongeraho iminota 30.

#### 2. Isaha y'imibare

Umubare uhagarariye amasaha ukurikirwa n'utudomo tubiri natwo tugakurikirwa n'umubare 30.



### Reka nisuzume

#### 1) Shushanya isaha y'inshinge yerekana:

a) Saa sita n'igice

b) Saa tatu n'igice

#### 2) Shushanya isaha y'imibare ibara

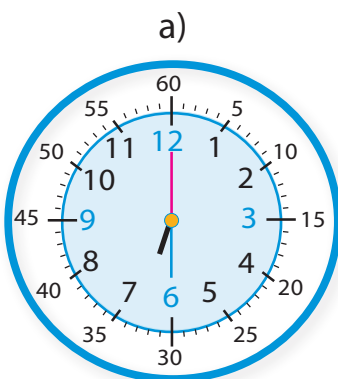
a) Saa kumi n'imwe n'igice

b) Saa saba n'igice

### C. Isaha iburaho iminota 30

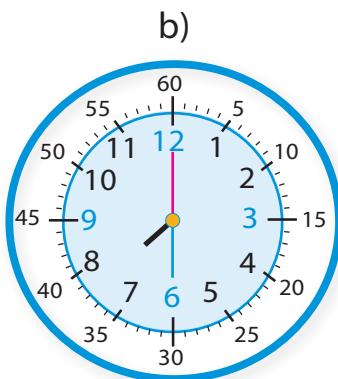
#### Igikorwa

Mwitegereze amasaha muvuge igihe yerekana:



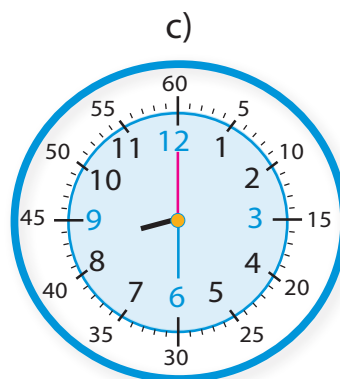
d.

6:30



e.

7:30



f.

8:30

### Nsobanukiwe ko:

#### 1. Isaha y'inshinge

Bavuga ko isaha iburaho iminota mirongo itatu (30) iyo urushinge rugufi rubara amasaha ruri hagati y'imibare 2 iri mu isaha naho urushinge rurerure rubara iminota ruri ku mubare 6. Usoma umubare ukurikira urushinge rubara amasaha ukongeraho ko ibura iminota mirongo itatu (30).

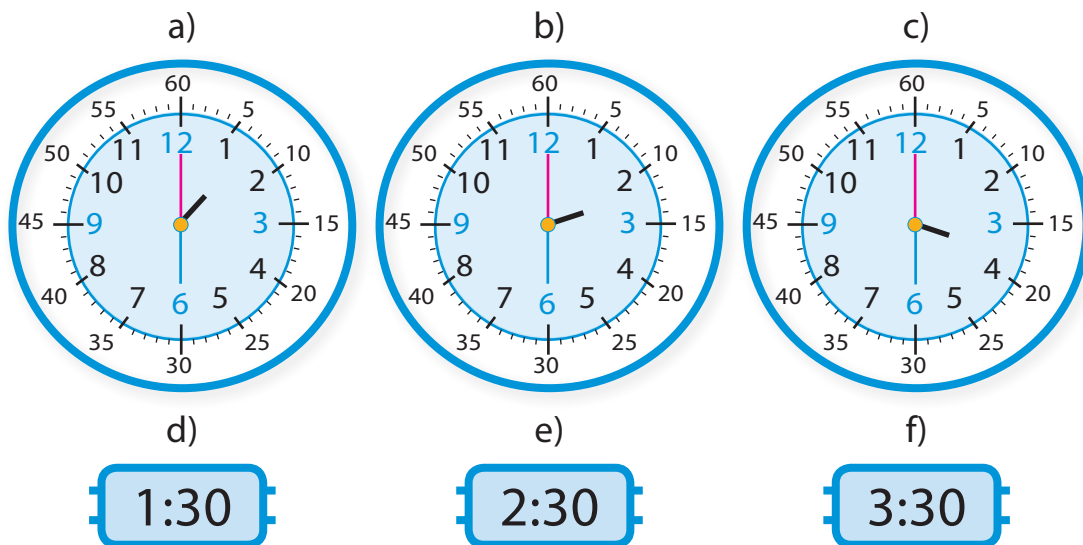
#### 2. Isaha y'imibare

Umubare uhagarariye amasaha ni umubare ukurikira uri mu isaha ukurikirwa n'utudomo tubiri natwo tugakurikirwa n'umubare 30.



### Nsuzuma ngusuzume

Mwitegereze amasaha, muvuge igihe yerekana.



### Imyitozo

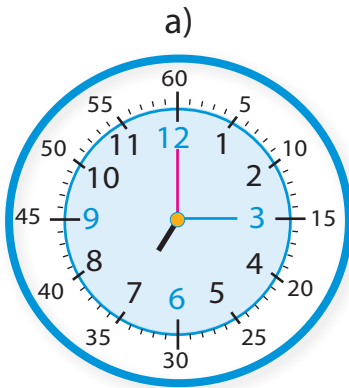
Shushanya isaha y'inshinge n'iy'imibare werekana:

- a) Saa munani zibura iminota 30
- b) Saa kumi n'ebiri zibura iminota 30

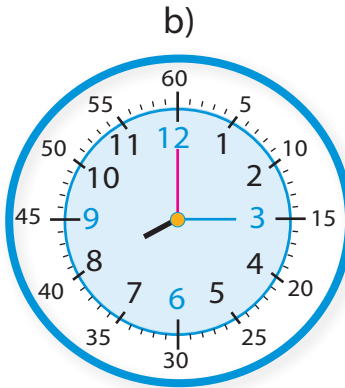
## D. Isaha irengaho iminota 15

### Igikorwa

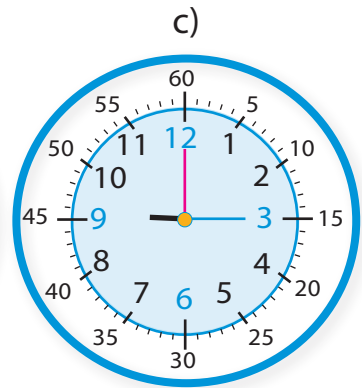
Mwitegereze amasaha, muvuge igihe yerekana.



d) 7:15



e) 8:15



f) 9:15

### Nsobanukiwe ko:

#### 1. Isaha y'inshinge

Isaha iba irengaho iminota cumi n'itanu iyo urushinge rugufi rubara amasaha rurenze gatoya ku mubare uwo ari wo wose uri mu isaha naho urushinge rurerure rubara iminota ruri ku mubare 3.

#### 2. Isaha y'imibare

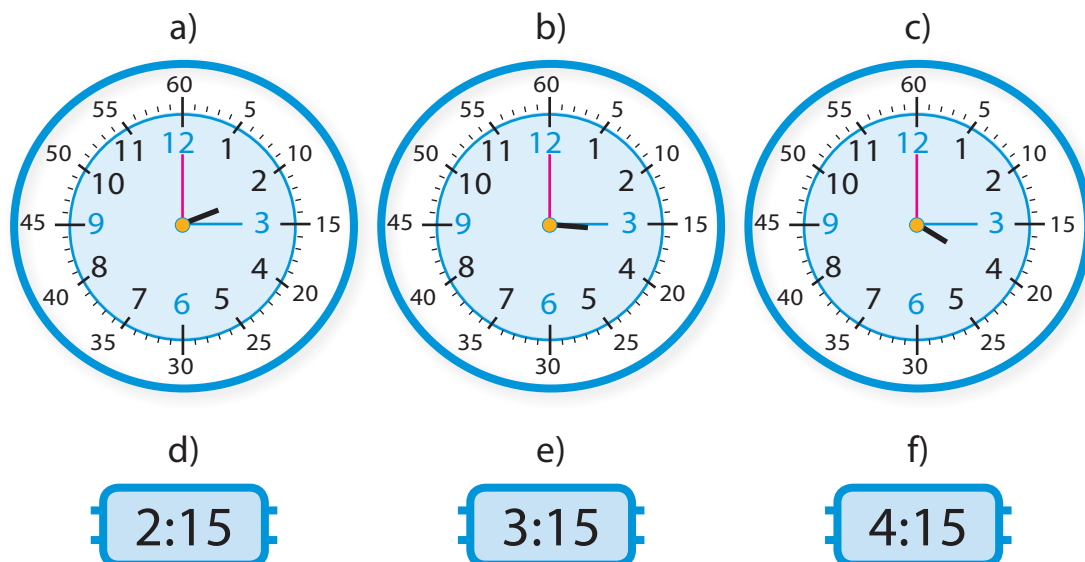
Umubare uhagarariye amasaha uba ukurikiwe n'utudomo tubiri natwo tugakurikirwa n'umubare 15.





## Nsuzuma ngusuzume

Mwitegereze amasaha muvuge igihe yerekana:



## Reka nisuzume

1) Shushanya isaha y'inshinge yerekana:

- a) Saa saba na cumi n'itanu
- b) Saa yine n'igice

2) Shushanya isaha y'imibare ibara

- a) Saa kumi n'imwe na cumi n'itanu
- b) Saa saba na cumi n'itanu

## Umwitozo



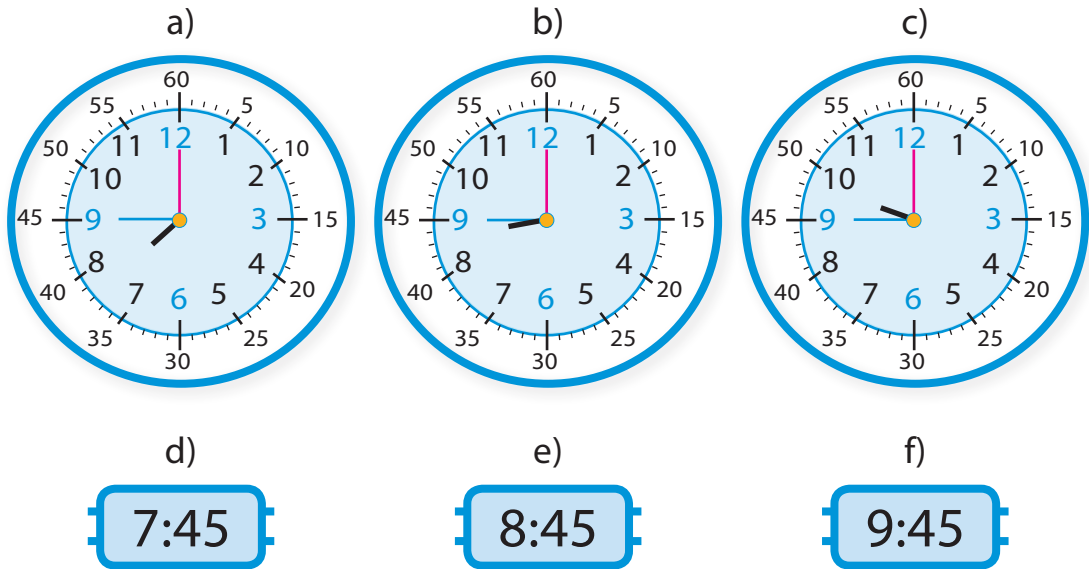
Shushanya isaha y'inshinge n'iy'imibare yerekana:

- a) 8:00
- b) 10:30
- c) 11:15
- d) 6:30

## E Isaha iburaho iminota 15

### Igikorwa

Mwitegereze amasaha muvuge igihe yerekana:



### Nsobanukiwe ko:

#### 1. Isaha y'inshinge

Bavuga ko isaha iburaho iminota cumi n'itanu (15) iyo urushinge rugufi rubara amasaha rurenze gatoya ku mubare uwo ari wo wose uri mu isaha naho urushinge rurerure rubara iminota ruri ku mubare 9. icyo gihe usoma umubare ukurikira uriho urushinge rubara amasaha ukongeraho ko ibura iminota cumi n'itanu (15).

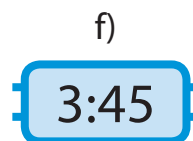
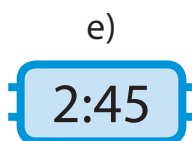
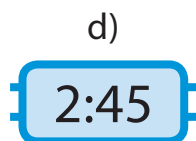
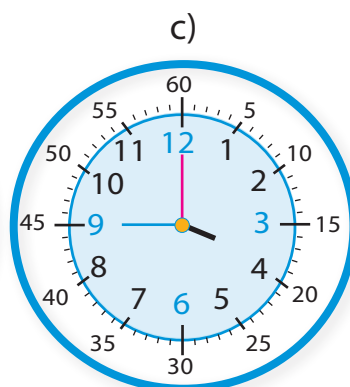
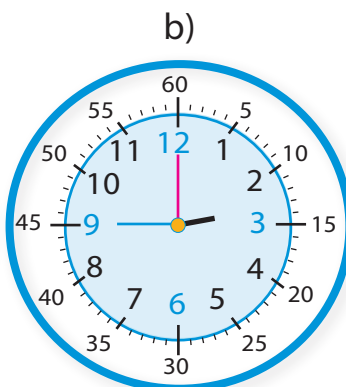
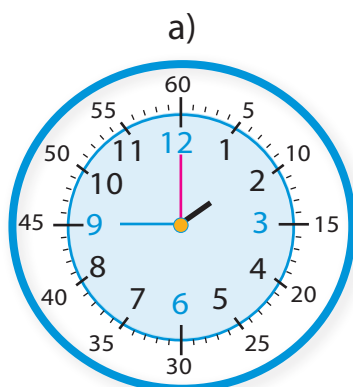
#### 2. Isaha y'imibare

Umubare uhagarariye amasaha uba ukurikiwe n'utudomo tubiri natwo tugakurikirwa n'umubare 45.



## Nsuzuma ngusuzume

Mwitegereze amasaha muvuge igihe yerekana:



## Imyitozo

1) Shushanya isaha y'inshinge yerekana:

a) Saa mbiri zibura iminota 15

b) Saa kumi n'imwe zibura iminota 15

2) Ni gihe ki?

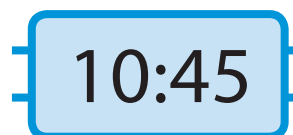
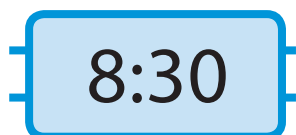
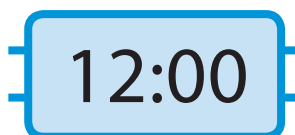
a) 12:15

b) 7:15

## 9.2 Gusoma ukandika igihe kerekanwe ku isaha

### Igikorwa cya 1

Musome, mwandike igihe kerekanwe n'aya masaha y'imibare.



### Nsobanukiwe ko:

Iyo bandika isaha bandika umubare w'isaha ugakurikirwa n'utudomo tubiri hagakurikiraho umubare w'iminota.

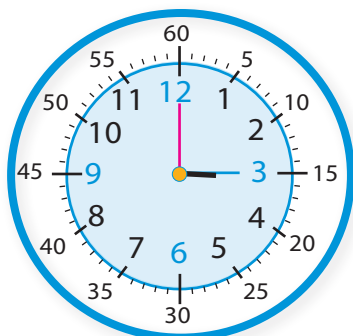
| Imibare | Isaha werekana                              | Isaha |
|---------|---------------------------------------------|-------|
| 1       | Saa saba z'amanywa cyangwa z'ijoro          | 1:00  |
| 2       | Saa munani z'amanywa cyangwa z'ijoro        | 2:00  |
| 3       | Saa kenda z'amanywa cyangwa z'ijoro         | 3:00  |
| 4       | Saa kumi z'amanywa cyangwa z'ijoro          | 4:00  |
| 5       | Saa kumi n'imwe z'amanywa cyangwa z'ijoro   | 5:00  |
| 6       | Saa kumi n'ebyiri z'amanywa cyangwa z'ijoro | 6:00  |
| 7       | Saa moya z'amanywa cyangwa z'ijoro          | 7:00  |
| 8       | Saa mbiri z'amanywa cyangwa z'ijoro         | 8:00  |
| 9       | Saa tatu z'amanywa cyangwa z'ijoro          | 9:00  |
| 10      | Saa yine z'amanywa cyangwa z'ijoro          | 10:00 |
| 11      | Saa tanu z'amanywa cyangwa z'ijoro          | 11:00 |
| 12      | Saa sita z'amanywa cyangwa z'ijoro          | 12:00 |



## Nsuzuma ngusuzume

Mwitegereze, musome hanyuma mwandike amasaha yerekanwe mu mibare no mu magambo.

a)



d)

11:00

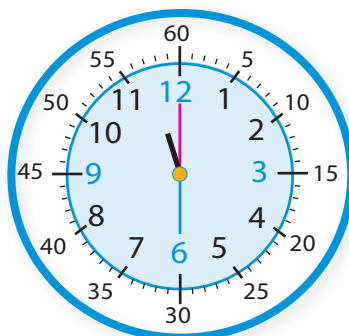
b)



e)

7:00

c)



f)

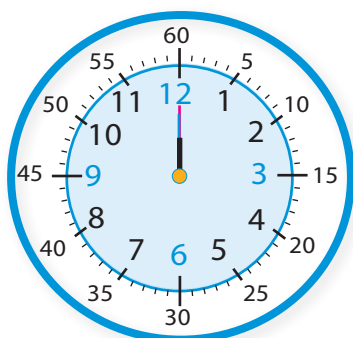
12:15

## Imyitozo



- 1) Andika mu mibare no mu magambo igihe kerekanwe n'amasaha akurikira:

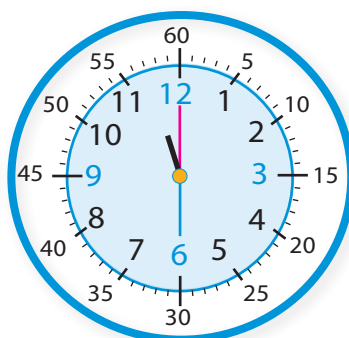
a)



b)



c)



- 2) Shushanya amasaha y'inshinge yerekana:

a) 10:45

c) Saa saba na 15

b) Saa munani na 30

d) 6:00

## 9.3 Indangaminsi

### Igikorwa cya 1

Mwitegereze indangaminsi y'umwaka wa 2018, musubize ibibazo.

| Mutarama 2018 |              |              |            |              |                 |             |
|---------------|--------------|--------------|------------|--------------|-----------------|-------------|
| Ku wa Mbere   | Ku wa Kabiri | Ku wa Gatatu | Ku wa Kane | Ku wa Gatanu | Ku wa Gatandatu | Ku Cyumweru |
|               | 1            | 2            | 3          | 4            | 5               | 7           |
| 8             | 9            | 10           | 11         | 12           | 13              | 14          |
| 15            | 16           | 17           | 18         | 19           | 20              | 21          |
| 22            | 23           | 24           | 25         | 26           | 27              | 28          |
| 29            | 30           | 31           |            |              |                 |             |

- 1) Iyo ndangaminsi iriho amezi angahe? Yavuge
- 2) Ukwezi kwa mbere k'umwaka wa 2018:
  - a) Gutangira ku wa kangahe?
  - b) Kurangira ku wa kangahe?
  - c) Gufite iminsi ingahe?
- 3) Umwaka wa 2018 ufite ibyumweru bingahe?
- 4) Umwaka wa 2018 ufite iminsi ingahe?
- 5) Mwandike amatariki akurikira:
  - a) Amatariki y'amavuko yanyu
  - b) Amatariki mwafungiyeho igihembwe cya mbere
  - c) Amatariki mwafunguriyeho igihembwe cya 2

### Nsobanukiwe ko:

Umwaka ugira amezi 12.

| Amezi       | Iminsi |
|-------------|--------|
| Mutarama    | 31     |
| Gashyantare | 28/29  |
| Werurwe     | 31     |
| Mata        | 30     |
| Gicurasi    | 31     |
| Kamena      | 30     |

| Amezi      | Iminsi |
|------------|--------|
| Nyakanga   | 31     |
| Kanama     | 31     |
| Nzeri      | 30     |
| Ukwakira   | 31     |
| Ugushyingo | 30     |
| Ukuboza    | 31     |

Umwaka ugira ibyumweru 52. Iminsi 365 cyangwa 366. Icyumweru kigira iminsi 7, umunsi ukagira amasaha 24.

### Igikorwa cya 2

Mwigane indangaminsi ya 2018 muyishushanye mugarukire ku mezi 4 abanza.

## 9.4 Umwaka usanzwe n'umwaka udasanzwe

### Igikorwa cya 1

Mwifashishe indangaminsi, muganire ku myaka ikurikira maze muvuge iminsi igize ukwezi kwa Gashyantare.

- a) Umwaka wa 2018
- b) Umwaka wa 2017
- c) Umwaka wa 2016
- d) Umwaka wa 2015

Ese muri iyi myaka ni uwuhe ugabanyika na 4?

#### Nsobanukiwe ko:

- Imyaka ya 2015, 2017, na 2018 ari imyaka isanzwe
- Umwaka usanzwe uba ufite ukwezi kwa Gashyantare gufite iminsi 28.
- Umwaka usanzwe ugira iminsi 365.
- Umwaka usanzwe ntabwo ugabanyika na 4
- Umwaka wa 2016 ni umwaka udasanzwe
- Umwaka udasanzwe uba ufite ukwezi kwa Gashyantare gufite iminsi 29.
- Umwaka udasanzwe ugira iminsi 366.
- Umwaka udasanzwe ugabanyika na 4.

### Igikorwa cya 2

Itegereze urugero, uvuge imyaka isanzwe iri mbere ya 2018.

#### Urugero:

Umwaka wa 2018 ni umwaka usanzwe, ufite iminsi 365  
Umwaka wa 2016 wari umwaka udasanzwe ufite iminsi 366.

$$2018 : 4 = 504 \text{ Hasigaye 2}$$

$$\begin{array}{r} 2018 \quad 4 \\ - 20 \quad \underline{\phantom{00}} \\ 001 \quad \phantom{00} \\ - 0 \quad \underline{\phantom{00}} \\ 18 \quad \phantom{00} \\ - 16 \quad \underline{\phantom{00}} \\ 02 \end{array}$$

Hasigaye 2

$$2016 : 4 = 504$$

$$\begin{array}{r} 2016 \quad 4 \\ - 20 \quad \underline{\phantom{00}} \\ 001 \quad \phantom{00} \\ - 0 \quad \underline{\phantom{00}} \\ 16 \quad \phantom{00} \\ - 16 \quad \underline{\phantom{00}} \\ 00 \end{array}$$

## Imyitozo

- 1) Hitamo imyaka isanzwe muri iyi ikurikira:
 

|         |         |         |
|---------|---------|---------|
| a) 1990 | c) 1994 | e) 1993 |
| b) 1992 | d) 1995 | f) 1991 |
- 2) Vuga imyaka idasanzwe iri muri iyi ikurikira:
 

|         |         |         |
|---------|---------|---------|
| a) 1990 | c) 1998 | e) 1994 |
| b) 1996 | d) 1992 | f) 1999 |
- 3) Shaka imyaka idasanzwe iri hagati ya 1998 na 2021

## 9.5 Guhindura imyaka mu mezi

### Igikorwa

Mwitegereze ibyakozwe ku rugero maze musobanure.

**Urugero:** Imyaka 6 ingana n'amezi angahe?

Umwaka 1 ungana n'amezi 12

Imyaka 6 ingana n'amezi  $12 \times 6 = \text{Amezi 72}$

### Nsobanukiwe ko:

Iyo uhindura imyaka mu mezi ufata amezi 12 agize umwaka ukayakuba n'umubare w'imyaka baguhaye.





### Nsuzuma ngusuzume

- |                           |                           |
|---------------------------|---------------------------|
| a) Imyaka 9 = Amezi ____  | d) Imyaka 8 = Amezi ____  |
| b) Imyaka 10 = Amezi ____ | e) Imyaka 7 = Amezi ____  |
| c) Imyaka 15 = Amezi ____ | f) Imyaka 13 = Amezi ____ |



### Reka nisuzume

- |                          |                           |
|--------------------------|---------------------------|
| a) Imyaka 2 = Amezi ____ | d) Imyaka 11 = Amezi ____ |
| b) Imyaka 3 = Amezi ____ | e) Imyaka 12 = Amezi ____ |
| c) Imyaka 4 = Amezi ____ | f) Imyaka 14 = Amezi ____ |

## 9.6 Guhindura ibyumweru mu minsi

### Igikorwa

Mwitegereze ibyakozwe ku rugero maze musobanure.

**Urugero:** Ibyumweru 3 = Iminsi ingahe?

Icyumweru 1 kingana n'iminsi 7

Ibyumweru 3 bingana n'iminsi  $7 \times 3$  ni iminsi 21

### Nsobanukiwe ko:

Iyo uhindura ibyumweru mu minsi, ufata iminsi 7 igize icyumweru ukayikuba n'umubare w'ibyumweru baguhaye.



### Nsuzuma ngusuzume

- |                               |                               |
|-------------------------------|-------------------------------|
| a) Ibyumweru 9 = Iminsi ____  | d) Ibyumweru 20 = Iminsi ____ |
| b) Ibyumweru 11 = Iminsi ____ | e) Ibyumweru 8 = Iminsi ____  |
| c) Ibyumweru 15 = Iminsi ____ | f) Ibyumweru 5 = Iminsi ____  |



### Reka nisuzume

- |                               |                               |
|-------------------------------|-------------------------------|
| a) Ibyumweru 19 = Iminsi ____ | d) Ibyumweru 80 = Iminsi ____ |
| b) Ibyumweru 31 = Iminsi ____ | e) Ibyumweru 38 = Iminsi ____ |
| c) Ibyumweru 45 = Iminsi ____ | f) Ibyumweru 45 = Iminsi ____ |

## Imyitozo



- a) Ibyumweru 24 = Iminsi \_\_\_\_ d) Ibyumweru 40 = Iminsi \_\_\_\_  
b) Ibyumweru 19 = Iminsi \_\_\_\_ e) Ibyumweru 82 = Iminsi \_\_\_\_  
c) Ibyumweru 55 = Iminsi \_\_\_\_ f) Ibyumweru 56 = Iminsi \_\_\_\_

## 9.7 Guhindura iminsi mu masaha

### Igikorwa

Mwitegereze ibyakozwe ku rugero maze musobanure.

**Urugero:** Iminsi 2 ingana n'amasaha angahe?

Umunsi 1 ungana n'amasaha 24

Iminsi 2 ingana n'amasaha  $24 \times 2$  ni amasaha 48

### Nsobanukiwe ko:

Iyo uhindura iminsi mu masaha ufata amasaha agize umunsi ari yo 24 ukayakuba n'umubare w'iminsi baguhaye.



### Nsuzuma ngusuzume

- a) Iminsi 15 = Amasaha \_\_\_\_ d) Iminsi 8 = Amasaha \_\_\_\_  
b) Iminsi 7 = Amasaha \_\_\_\_ e) Iminsi 18 = Amasaha \_\_\_\_  
c) Iminsi 10 = Amasaha \_\_\_\_ f) Iminsi 35 = Amasaha \_\_\_\_



### Reka nisuzume



- a) Iminsi 13 = Amasaha \_\_\_\_ d) Iminsi 17 = Amasaha \_\_\_\_  
b) Iminsi 6 = Amasaha \_\_\_\_ e) Iminsi 35 = Amasaha \_\_\_\_  
c) Iminsi 9 = Amasaha \_\_\_\_ f) Iminsi 4 = Amasaha \_\_\_\_

## Imyitozo



- a) Iminsi 3 = Amasaha \_\_\_\_ d) Iminsi 14 = Amasaha \_\_\_\_  
b) Iminsi 4 = Amasaha \_\_\_\_ e) Iminsi 16 = Amasaha \_\_\_\_  
c) Iminsi 5 = Amasaha \_\_\_\_ f) Iminsi 19 = Amasaha \_\_\_\_

## 9.8 Gahunda z'ibikorwa

### A. Gahunda y'ibikorwa bya buri muni

#### Igikorwa cya 1

Mwitegereze gahunda y'ibikorwa bya buri muni bya Muhoza muyigireranye n'ibyo musanzwe mukora.

| Igihe                         | Ibikorwa                             |
|-------------------------------|--------------------------------------|
| Saa 6:00 za mu gitondo        | Kubyuka                              |
| Saa 6:00 – 6:30 za mu gitondo | Kwitunganya                          |
| Saa 7:00 za mu gitondo        | Kujya ku ishuri                      |
| Saa 7:30 – 12:30 z'amanywa    | Amasomo                              |
| Saa 12:30 – 1:30 z'amanywa    | Gufata ifunguro ryo ku manywa        |
| Saa 2:00 – 4:30 z'umugoroba   | Amasomo                              |
| Saa 4:30 – 4:50 z'umugoroba   | Kwandika umukoro wo mu rugo          |
| Saa 4:50 – 5:00 z'umugoroba   | Gutunganya ibitabo n'ibikoresho      |
| Saa 5:00 z'umugoroba          | Gutaha                               |
| Saa 6:00 z'umugoroba          | Gukaraba                             |
| Saa 7:00 z'ijoro              | Gusubira mu masomo no gukora umukoro |
| Saa 8:00 z'ijoro              | Gufata ifunguro rya nijoro           |
| Saa 9:00 z'ijoro              | Kuryama                              |

#### Igikorwa cya 2

Ukurikije gahunda y'ibikorwa bya Muhoza umaze kubona, kora gahunda y'ibikorwa byawe by'ejo.

## B. Gahunda y'ibikorwa bya buri cyumweru

### Igikorwa cya 1

Mwitegereze gahunda y'ibikorwa bya buri cyumweru bya Mugisha muyigereranye n'ibyo musanzwe mukora.

| Igihe           | Ibikorwa                                                                                                                      |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------|
| Ku wa Mbere     | <ul style="list-style-type: none"><li>- Kuja ku ishuri</li><li>- Gukora umukoro</li></ul>                                     |
| Ku wa Kabiri    | <ul style="list-style-type: none"><li>- Kuja ku ishuri</li><li>- Kuhira indabo</li><li>- Gukora umukoro</li></ul>             |
| Ku wa Gatatu    | <ul style="list-style-type: none"><li>- Kuja ku ishuri</li><li>- Kugaburira inkoko</li><li>- Gukora umukoro</li></ul>         |
| Ku wa Kane      | <ul style="list-style-type: none"><li>- Kuja ku ishuri</li><li>- Gufasha ababyeyi isuku</li><li>- Gukora umukoro</li></ul>    |
| Ku wa Gatanu    | <ul style="list-style-type: none"><li>- Kuja ku ishuri</li><li>- Gusoma ibitabo by'udukuru</li><li>- Gukora umukoro</li></ul> |
| Ku wa Gatandatu | <ul style="list-style-type: none"><li>- Gufasha kumesa no gusukura</li><li>- Gukora umukoro</li></ul>                         |
| Ku Cyumweru     | <ul style="list-style-type: none"><li>- Gusenga</li></ul>                                                                     |

### Igikorwa cya 2

Ukurikije gahunda y'ibikorwa bya Mugisha umaze kubona, kora gahunda y'ibikorwa byawe by'icyumweru gitaha.

## C. Gahunda y'ibikorwa by'ukwezi

### Igikorwa cya 1

Mwitegereze gahunda y'ibikorwa bya buri kwezi bya Kamariza muyigereranye n'ibyo musanzwe mukora.

| Igihe           | Ibikorwa                                                                                                                                       |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Icyumweru cya 1 | <ul style="list-style-type: none"> <li>– Kwigira</li> <li>– Uturimo two mu rugo</li> <li>– Gusenga</li> </ul>                                  |
| Icyumweru cya 2 | <ul style="list-style-type: none"> <li>– Kwigira</li> <li>– Uturimo two mu rugo</li> <li>– Gusenga</li> <li>– Gusura inshuti</li> </ul>        |
| Icyumweru cya 3 | <ul style="list-style-type: none"> <li>– Kwigira</li> <li>– Uturimo two mu rugo</li> <li>– Gusenga</li> <li>– Amarushanwa y'umupira</li> </ul> |
| Icyumweru cya 4 | <ul style="list-style-type: none"> <li>– Kwigira</li> <li>– Uturimo two mu rugo</li> <li>– Gusenga</li> <li>– Kujya gusura abarwayi</li> </ul> |

## Igikorwa cya 2

Ukurikije gahunda y'ibikorwa bya Kamariza umaze kubona, kora gahunda y'ibikorwa byawe by'ukwezi gutaha.

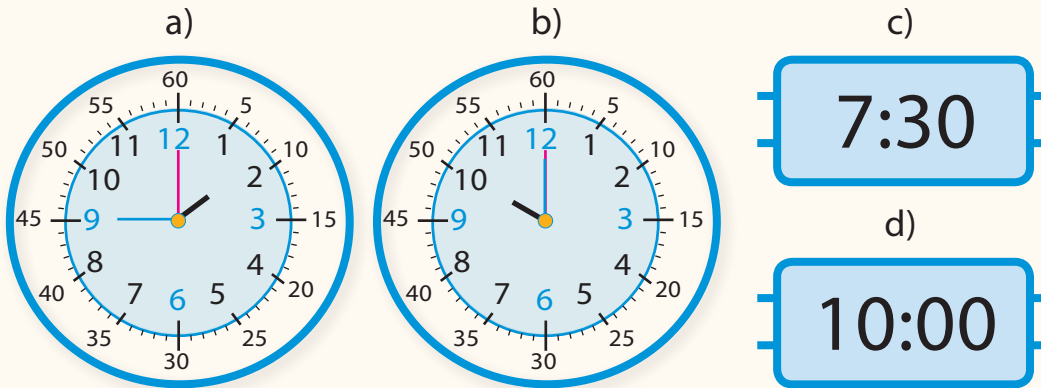
### Nsobanukiwe ko:

Gukora gahunda y'ibyo ukora mbere yo kubikora bigufasha kubahiriza igihe neza. Gukoresha igihe neza bituma udatakaza umwanya.

Gukora gahunda y'ibikorwa bigufasha gukora neza ufite intego.

## 9.9 Isuzuma risoza umutwe wa 9

1) Soma wandike igihe kerekanwe kuri aya masaha



2) Hindura mu gihe wabajijwe

- a) Imyaka 40 = Amezi \_\_\_\_
- b) Ibyumweru 50 = Iminsi \_\_\_\_
- c) Iminsi 33 = Amasaha \_\_\_\_
- d) Imyaka 19 = Amezi \_\_\_\_
- e) Iminsi 29 = Amasaha \_\_\_\_

3) Uzuza izi nteruro

- a) Umwaka usanzwe ugira iminsi \_\_\_\_ naho udasanzwe ukagira iminsi \_\_\_\_
- b) Ukwezi kugira ibyumweru \_\_\_\_ naho umwaka ukagira amezi \_\_\_\_
- c) icyumweru kigira iminsi \_\_\_\_ naho umunsi ukagira amasaha \_\_\_\_
- d) Ukwezi kugira iminsi muke mu mezi y'umwaka ni \_\_\_\_

4) Hitamo imyaka isanzwe muri iyi ikurikira

- |         |         |         |
|---------|---------|---------|
| a) 2000 | c) 2002 | e) 2005 |
| b) 2004 | d) 2007 | f) 2008 |

5) Vuga imyaka idasanzwe iri muri iyi ikurikira

- |         |         |         |
|---------|---------|---------|
| a) 2000 | c) 2010 | e) 2012 |
| b) 2016 | d) 2019 | f) 2008 |

6) Shaka imyaka idasanzwe iri hagati ya 2010 na 2030

# Amoko y'imirongo n'imfuruka



Sebisusa yahuguriwe guhinga kijyambere. Abajyanama b'ubuhinzi bamusuye basanga yarateye imyaka ye mu murima udatunganyije neza, yarayiteye ku mirongo itagororotse. Ese akeneye kumenya iki mu mibare?



## 10.1 Amoko y'imirongo

### A. Imirongo igororotse

#### Igikorwa cya 1

Mwitegereze imirongo ikurikira, muvuge ibiyiranga.

a)

\_\_\_\_\_

b)

|

c)

///

#### Igikorwa cya 2

- Mwifashishije uducamurongo muce imirongo iteye nk'iyo mumaze kwitegereza mu gikorwa cya 1;
- Muyice nta kintu mwifashishije kindi uretse ikaramu n'urupapuro;
- Mugereranye munaganire kuri iyo mirongo yo muri a) n'iyo muri b).

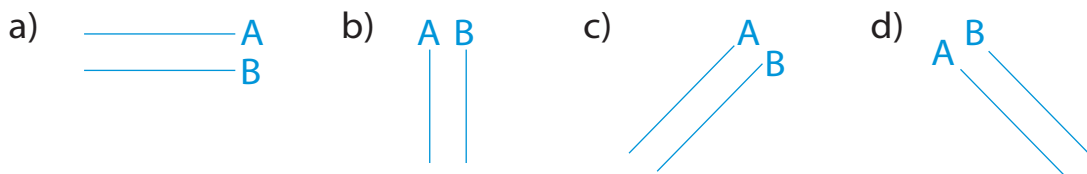
**Nsobanukiwe ko:**

Imirongo igiye umujyho umwe ari imirongo igororotse.

## B. Imirongo iteganye

### Igikorwa cya 1

Mwitegereze imirongo ikurikira, muvuge ibiyiranga.



Reka nisuzume

Ifashishe agacamurongo uce imirongo ibiri igororotse uheze urupapuro urebe niba ihura.

### Nsobanukiwe ko:

Imirongo igororotse iteganye idashobora guhura. Imirongo igororotse iteganye iba ifite intera ingana hagati yayo.



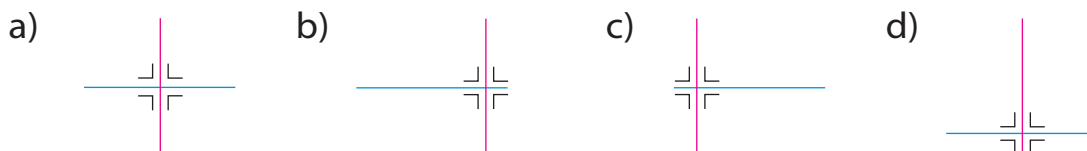
Nsuzuma ngusuzume

1. Mwifashishije agacamurongo muce imirongo itatu itatu iteganye.
2. Mwitegereze mu ishuri mwerekane ibintu biriho imirongo iteganye muvuge ibindi musanzwe muzi biriho iyo mirongo.

## C. Imirongo inyuranamo igakora imfuruka zigororotse

### Igikorwa cya 1

Mwitegereze imirongo ikurikira muvuge ibiyiranga



Reka nisuzume

Mwifashishije agacamurongo muce imirongo ibiri igororotse uhagaze n'utambitse, ihura igakora imfuruka igororotse.



### Nsobanukiwe ko:

Imirongo inyuranamo iba igiye mu byerekezo bitandukanye. Umurongo ugororotse utambitse n'umurongo ugororotse uhagaze iyo inyuranamo bikora imfuruka 4 zigororotse.



### Nsuzuma ngusuzume

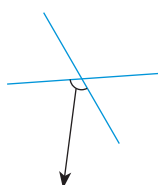
- Mushushanye imirongo inyuranamo igakora imfuruka zigororotse.
- Mukoreshe amarati, uduti, utubuye n'amakaramu mukore imirongo ibiri igororotse ihura igakora imfuruka igororotse.

### D. Imirongo inyuranamo igakora imfuruka zagutse n'izifunganye

#### Igikorwa cya 1

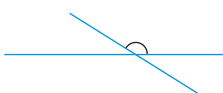
Mwitegereze imirongo ikurikira muvuge ibiyiranga

a)

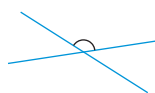


Imfuruka yagutse

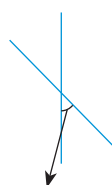
b)



c)



d)



Imfuruka ifunganye



### Reka nisuzume



Ifashishe agacamurongo uce imirongo ibiri igororotse iberamye, inyuranamo igakora imfuruka zagutse n'izifunganye.

### Nsobanukiwe ko:

Imirongo inyuranamo iba igiye mu byerekezo bitandukanye. Umurongo ugororotse uberamiye iburyo n'uberamiye ibumoso iyo bihuye bikora imfuruka 4. Ebyiri zagutse n'ebyiri zifunganye.



## Nsuzuma ngusuzume

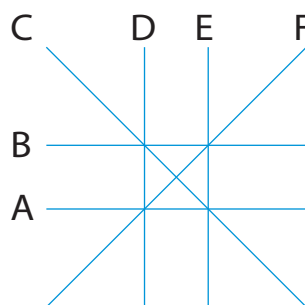
- Shushanya imirongo igororotse inyuranamo igakora imfuruka zagutse n'izifunganye.
- Koresha amarati, uduti, utubuye amakaramu ukore imirongo 2 igororotse iberamye ihura igakora imfuruka.

## Imyitozo



Itegereze uvuge amazina y'imirongo wabajijwe

- A na B ni imirongo \_\_\_\_\_
- A na C ni imirongo \_\_\_\_\_
- A na D ni imirongo \_\_\_\_\_
- A na F ni imirongo \_\_\_\_\_
- A na E ni imirongo \_\_\_\_\_
- B na D ni imirongo \_\_\_\_\_
- B na C ni imirongo \_\_\_\_\_
- B na E ni imirongo \_\_\_\_\_

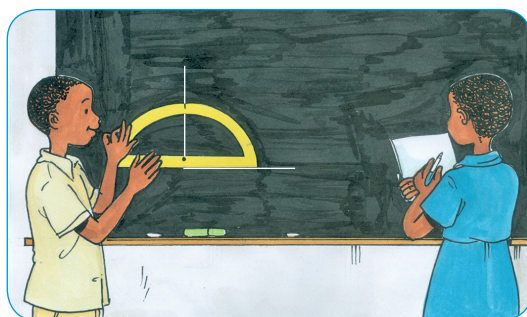


## 10.2 Amoko y'imfuruka

### A. Imfuruka igororotse

#### Igikorwa cya 1

Mwitegereze iyi shusho muvuge ibyo mubonaho.



## Reka nisuzume



Ifashishije ingeramfuruka, ushushanye imfuruka igororotse.

### Nsobanukiwe ko:

Imfuruka igororotse ikorwa n'imirongo 2 igororotse. Uhagaze n'utambitse. Imfuruka igororotse ipima dogere 90.



### Nsuzuma ngusuzume

- Shushanya imfuruka 4 zigororotse.
- Erekana ibintu biriho imfuruka igororotse biri mu ishuri cyangwa uvuge ibindi usanzwe uzi biriho iyo mfuruka.

## B. Imfuruka ifunganye

### Igikorwa cya 1

Mwitegereze iyi shusho, muvuge ibyo mubonaho.



### Reka nisuzume

Ifashishe agacamurongo n'ingeramfuruka ushushanye imfuruka ifunganye.

### Nsobanukiwe ko:

Imfuruka ifunganye ikozwe n'imirongo igororotse umwe uhagaze cyangwa utambitse n'undi uberamye inyuranamo ku buryo ihura isa n'ifungana. Ibipimo by'imfuruka zifunganye biba muni ya dogere 90.

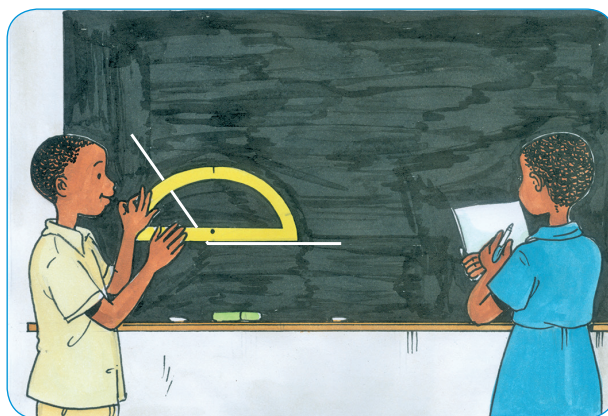
### Igikorwa cya 3

- a) Mushushanye imfuruka 4 zifunganye.
- b) Mwerekane ibintu biriho imfuruka ifunganye biri mu ishuri cyangwa ibindi bintu muzi.

### C. Imfuruka yagutse

#### Igikorwa cya 1

Mwitegereze iyi shusho muvuge ibyo mubonaho.



#### Reka nisuzume

Ifashishe ingeramfuruka ushushanye imfuruka yagutse.

#### Nsobanukiwe ko:

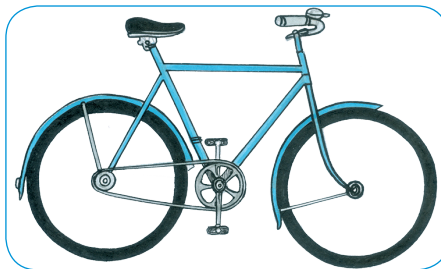
Imfuruka yagutse ikozwe n'imirongo igororotse umwe uhagaze cyangwa utambitse n'undi uberamye inyuranamo ku buryo ihura ikora inguni yagutse. Ibipimo by'imfuruka zagutse biba biri hagati dogere 90 na dogere 180.

### Igikorwa cya 3

- a) Shushanya imfuruka 4 zagutse.
- b) Erekan ibintu biriho imfuruka zagutse biri mu ishuri cyangwa ibindi bintu usanzwe uzi.

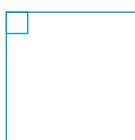
## Imyitozo

- 1) Mwitgereze iyi shusho mwerekane kandi muvuge amazina y'imfuruka ziriho.



- 2) Vuga amazina y'imfuruka zikurikira

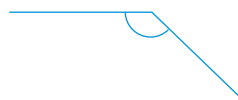
a)



b)



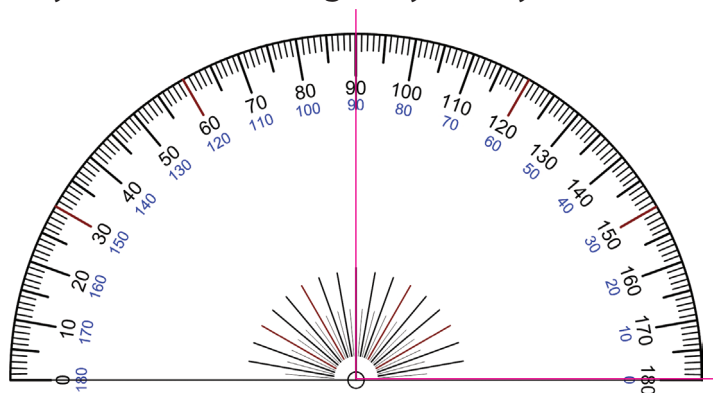
c)



## 10.3 Uko bakoresha ingeramfuruka bapima imfuruka

### Igikorwa cya 1

Mwitgereze iyi shusho muvuge ibyo muyibonaho.



### Nsobanukiwe ko:

- Ushyira ingeramfuruka ku nshonda (aho imirongo ikora imfuruka ihurira) y'imfuruka uteganyije na dogere 90.
- Ureba ko umurongo wa mbere w'imfuruka yawe unyura muri dogere zeru na dogere 180.
- Usoma dogere ziringaniye n'umurongo wa kabiri w'imfuruka yawe.

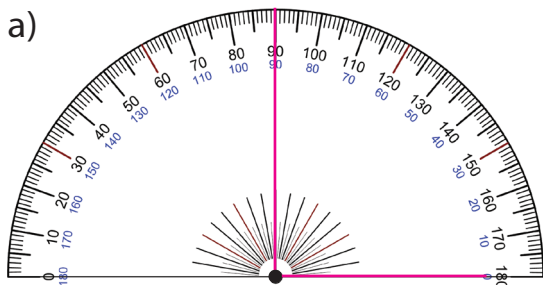


## Reka nisuzume

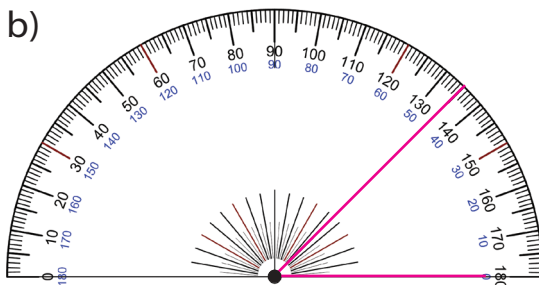


Itegereze uvuye ingano y'imfuruka iri kuri buri ngeramfuruka:

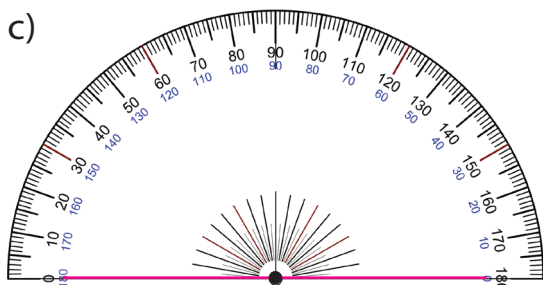
a)



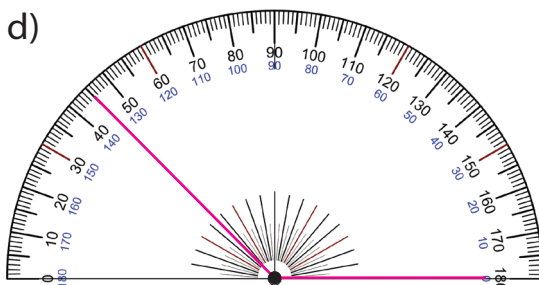
b)



c)



d)



## Nsuzuma ngusuzume

Koresha agacamurongo n'ingeramfuruka ushushanye imfuruka zifite dogere:

a) 75

c) 125

e) 76

b) 90

d) 150

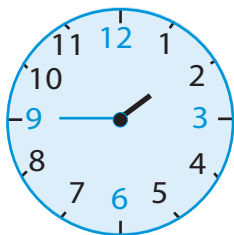
f) 35

## Imyitozo

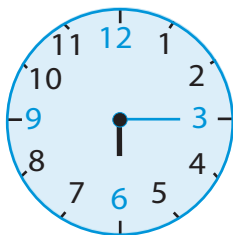


1) Koresha ingeramfuruka upime ingano y'imfuruka ikozwe n'inshinge z'isaha (urubara amasaha n'urubara iminota).

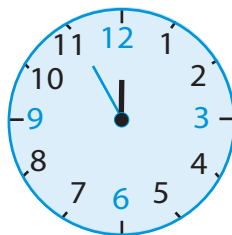
a)



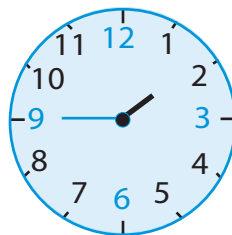
b)



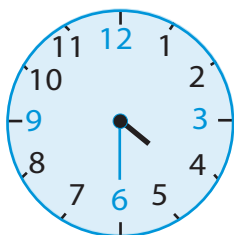
c)



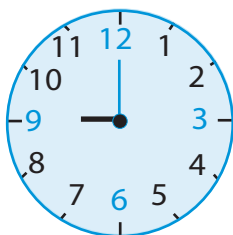
d)



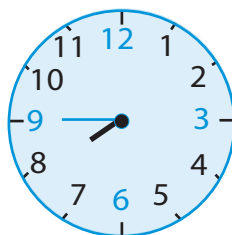
e)



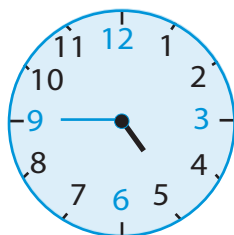
f)



g)



h)



2) Itegereze mbere yo gushushanya imfuruka wabajijwe hanyuma uvuge amazina yazo unazipime ukoresheje ingeramfuruka

A•

•B

C•

•D

E•

•F

G•

•H

I•

•J

K•

•L

a) Huza B na A hamwe na B na E

b) Huza J na K hamwe na J na F

c) Huza G na B hamwe na G na H

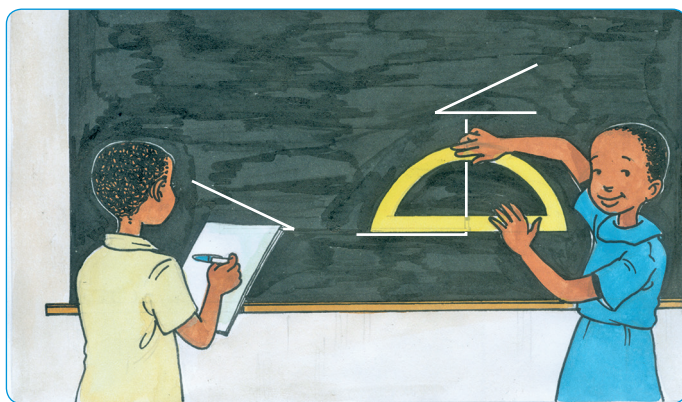
d) Huza I na J hamwe na I na F

## 10.4 Kugereranya imfuruka bapima

### A. Imfuruka igororotse n'ifunganye

#### Igikorwa

Mwitegereze iyi shusho muvuge ibiri gukorwa







## Reka nisuzume



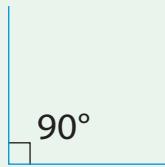
Shushanya imfuruka igororotse n'ifunganye, uzipime hanyuma ugereranye ibipimo byazo.

### Nsobanukiwe ko:

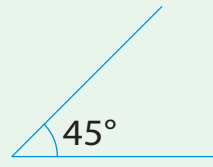
Imfuruka igororotse iruta imfuruka ifunganye.

**Urugero:**  $90^\circ > 45^\circ$

a) Imfuruka igororotse ya  $90^\circ$



b) Imfuruka ifunganye ya  $45^\circ$



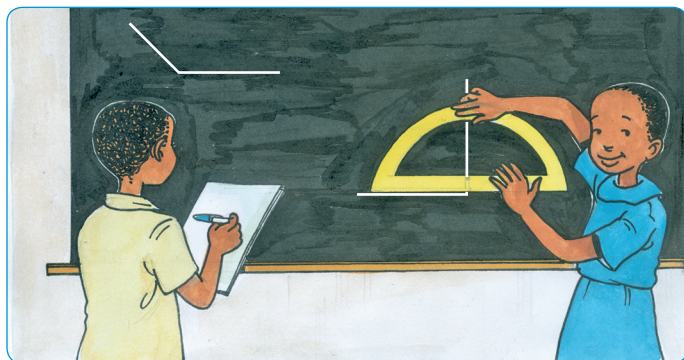
## Nsuzuma ngusuzume

Shushanya imfuruka 2 zigororotse n'izindi 2 zifunganye, koresha ingeramfuruka uzipime hanyuma ugereranye ibipimo byazo.

### B. Imfuruka igororotse n'iyagutse

#### Igikorwa

Mwitegereze iyi shusho muvuge ibiri gukorwa.







## Reka nisuzume

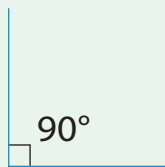
Shushanya imfuruka igororotse n'iyagutse, uzipime hanyuma ugereranye ibipimo byazo.

### Nsobanukiwe ko:

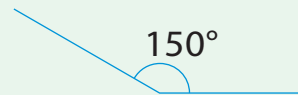
Imfuruka igororotse irutwa n'imfuruka yagutse

**Urugero:**  $90^\circ < 150^\circ$

a) Imfuruka igororotse ya  $90^\circ$



b) Imfuruka yagutse ya  $150^\circ$



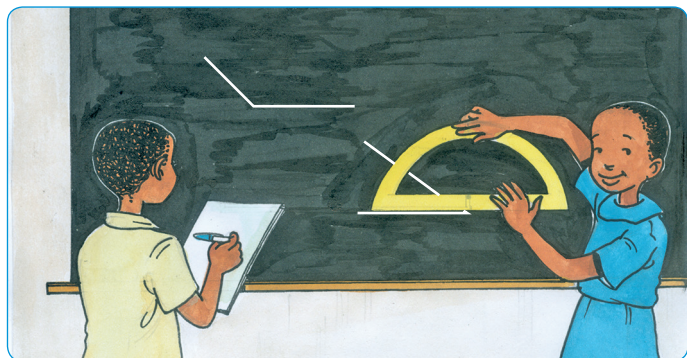
## Nsuzuma ngusuzume

Shushanya imfuruka 2 zigororotse n'izindi 2 zagutse, ukoreshe ingeramfuruka uzipime hanyuma ugereranye ibipimo byazo.

### C. Imfuruka ifunganye n'iyagutse

#### Igikorwa cya 1

Mwitegereze iyi shusho muvuge ibiri gukorwa.



#### Igikorwa cya 2

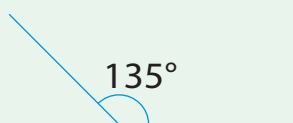
Shushanya imfuruka igororotse n'iyagutse, uzipime hanyuma ugereranye ibipimo byazo.

### Nsobanukiwe ko:

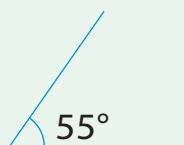
Imfuruka ifunganye irutwa n'imfuruka yagutse

Urugero:  $135^\circ > 55^\circ$

a) Imfuruka yagutse ya  $135^\circ$



b) Imfuruka ifunganye ya  $55^\circ$



### Nsuzuma ngusuzume

Shushanya imfuruka 2 zifunganye n'izindi 2 zagutse, ukoreshe ingeramfuruka uzipime hanyuma ugereranye ibipimo byazo.



### Reka nisuzume

Shushanya amasaha y'inshinge akurikira upime imfuruka zikozwe n'inshinge zibara iminota n'amasaha.

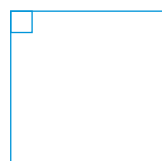
- a) Isaha ibara saa kenda na mirongo ine n'itanu
- b) 8:30
- c) Isaha ibara saa tanu na cumi n'itanu.

### Imyitozo

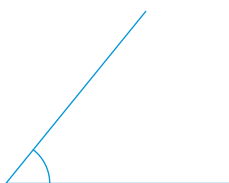


Pima izi mfuruka zikurikira ugereranye ingano yazo ukoresheje  $>$ ,  $<$  na  $=$

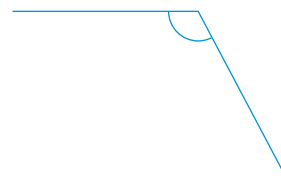
a)



b)

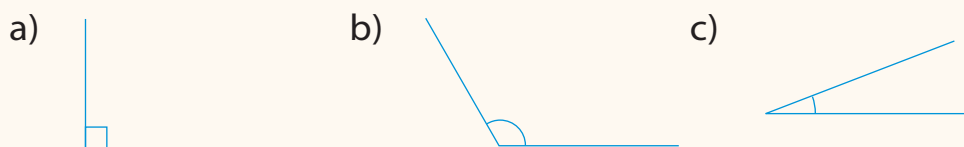


c)



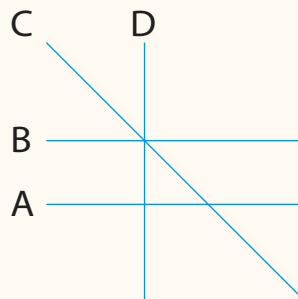
## 10.5 Isuzuma risoza umutwe wa 10

1) Koresha ingeramfuruka upime ingano y'izi mfuruka

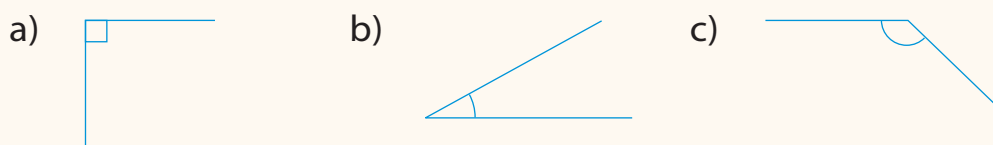


2) Itegereze imirongo ikurikira uvuge amazina yazo:

- A na B ni imirongo
- C na D ni imirongo
- A na D ni imirongo
- B na D ni imirongo
- C na A ni imirongo
- B na C ni imirongo



3) Vuga amazina y'imfuruka zikurikira:



4) Koresha agacamurongo n'ingeramfuruka ushushanye imfuruka zifite:

- $56^\circ$
- $98^\circ$
- $170^\circ$
- $135^\circ$

5) Shushanya

- Imirongo inyuranamo igakora imfuruka zigororotse.
- Imirongo ibiri iteganye.
- Imirongo inyuranamo igakora imfuruka zagutse n'izifunganye.

6) Subiza yego cyangwa oya

- Imfuruka igororotse iruta imfuruka yagutse.
- Imirongo igororotse iteganye ntishobora guhura.
- Imfuruka igororotse iruta imfuruka ifunganye.
- Imfuruka yagutse iruta imfuruka ifunganye.

# Kare, urukiramende, mpandeshatu n'uruziga



Umwubatsi yabajije Kalisa ishusho y'umurima n'umuzenguruko wawo, ngo amufashe kumenya ingano y'ibyo yakoresha awuzitira biramuyobera. Kalisa akeneye gusobanukirwa iki mu isomo ry'imibare kugira ngo atazongera guhura n'icyo kibazo?

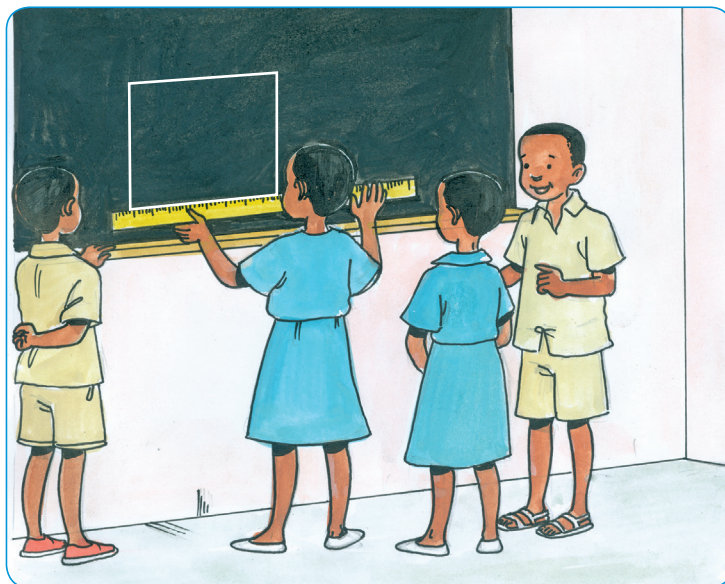


## 11.1 Kare

### A. Ibiranga Kare

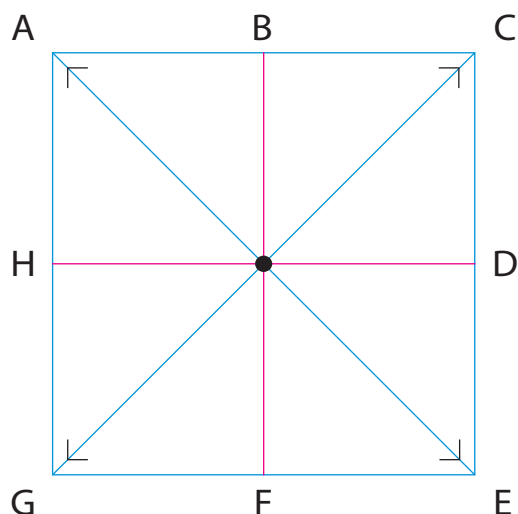
#### Igikorwa cya 1

Mwitegereze ishusho, mwigane ibirimo gukorwa.



## Igikorwa cya 2

Mwitegereze iyi kare, muvuge amazina y'imirongo ihuza inyuguti ziyiriho.



### Nsobanukiwe ko:

Kare ni ikinyampande, kandi irangwa n'ibi bikurikira:

- Kare igira impande 4 zingana ( $AC = CE = EG = AG$ )
- Kare igira imfuruka 4 zigororotse
- Kare igira ingwagati 2 zingana (BF) na (HD)
- Kare igira impuzampembe 2 zingana (AE) na (CG)
- Ingwagati ni imirongo igororotse igabanyamo impande za kare ziteganye mo ibice bibiri bingana.
- Impuzampembe ni imirongo igorotse ihuza imfuruka 2 za kare ziteganye. Ingwagati n'impuzampembe bya Kare bihurira mu kado mu rwagati k'imbere muri kare.

## Igikorwa cya 3

Shushanya kare ifite cm 8 uyishyiremo ibi bikurikira:

- Ingwagati
- Impuzampembe

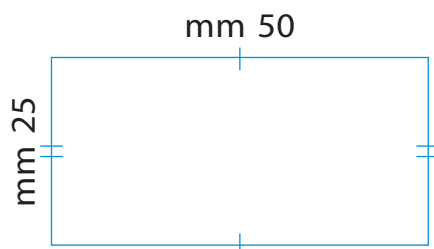


## Reka nisuzume

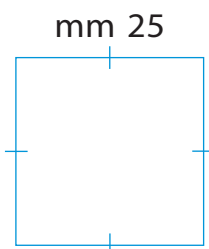


- 1) Mu mashusho akurikira garagazamo kare

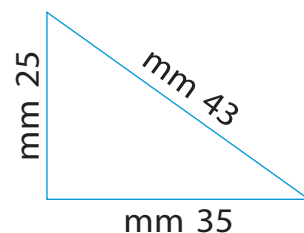
a)



b)



c)



- 2) Shushanya kare ifite cm 4 z'uruhande muyishyiremo ingwagati n'impuzampembe.



## Nsuzuma ngusuzume

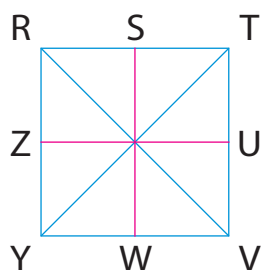


- 1) Mushake kandi muvuge ibintu bifite ishusho ya kare mu ishuri ryanyu.
- 2) Mukore amashusho ya kare mu mpapuro cyangwa ibikarito, muyakate neza, muyamanike mu ishuri ryanyu.

## Imyitozo



- 1) Muvuge ibintu muzi bigira ishusho ya kare.
- 2) Itegereze usubize ibibazo



Vuga amazina y'imirongo ikurikira:

- a) RV:
- b) ZU:
- c) SW:
- d) TY:

## B. Umuzenguruko wa Kare

### Igikorwa

- Mushushanye kare ifite cm 12 z'uruhande
- Muyizengurutseho akagozi. Mugakate

- Mupime buri ruhande muteranye uburebure bw'impande zose uko ari 4
- Mupime n'uburebure bwa ka kagozi
- Musobanure ibyo mubonye

#### Nsobanukiwe ko:

- Umuzenguruko wa kare ungana n'igiteranyo cy'uburebure bw'impande 4 ziyigize.
- $\text{Umuzenguruko} = \text{Uruhande} + \text{uruhande} + \text{uruhande} + \text{uruhande}$ .
- Umuzenguruko wa kare ungana n'uburebure bw'uruhande rumwe inshuro 4.
- $\text{Umuzenguruko} = \text{Uruhande} \times 4$
- Uruhande rwa kare rungana n'umuzenguruko wa kare ugabanyije 4.
- $\text{Uruhande} = \text{Umuzenguruko} : 4$

#### Urugero:

- 1) Shaka umuzenguruko wa kare ifite cm 75 z'uruhande.
- 2) Shaka uburebure bw'uruhande rumwe rwa kare ifite cm 900 z'umuzenguruko.

| Ibyo mfite                | Ibyo mbazwa           | Inzira n'igisubizo                                                                                             |
|---------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------|
| 1. Uruhande ni cm 75      | Umuzenguruko          | $\text{Umuzenguruko} = \text{uruhande} \times 4$<br>Umuzenguruko:<br>$\text{cm } 75 \times 4 = \text{cm } 300$ |
| 2. Umuzenguruko ni cm 900 | Uburebure bw'uruhande | $\text{Uruhande} = \text{umuzenguruko} : 4$<br>Uruhande:<br>$\text{cm } 900 : 4 = \text{cm } 225$              |



## Reka nisuzume



Shaka umuzenguruko wa kare ifite

- |                      |                      |
|----------------------|----------------------|
| a) cm 125 z'uruhande | c) cm 602 z'uruhande |
| b) cm 407 z'uruhande | d) cm 765 z'uruhande |



## Nsuzuma ngusuzume

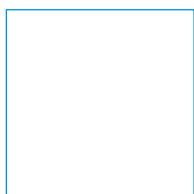
- Shaka uburebure bw'uruhande rumwe rwa kare ifite:
  - cm 640 z'umuzenguruko
  - cm 196 z'umuzenguruko
  - cm 312 z'umuzenguruko
  - cm 676 z'umuzenguruko
- Shaka umuzenguruko w'ikibanza cya kare gifite uruhande rupima m 80.
- Shaka uburebure bw'uruhande rw'umurima wa kare ifite m 1 700 z'umuzenguruko.

## Imyitozo



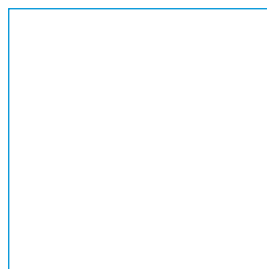
- Shaka umuzenguruko w'idirishya rya kare rifite uruhande rwa cm 145
- Shaka uburebure bw'uruhande rumwe rw'ikibanza gifite ishusho ya kare ifite m 160 z'umuzenguruko.
- Shaka umuzenguruko wa kare zikurikira

a)



25 cm

b)



35 cm



## 11.2 Urukiramende

### A. Ibiranga urukiramende

#### Igikorwa cya 1

Mwitegereze ishusho mwigane ibyo barimo gukora

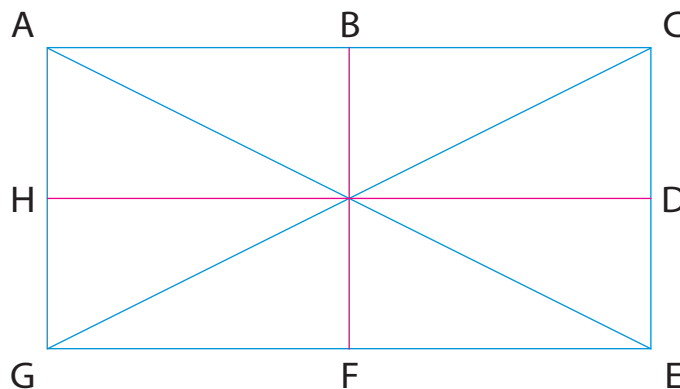


#### Igikorwa cya 2

Mushushanye urukiramende rufite cm 16 z'uburebure na cm 12 z'ubugari murwitegereze hanyuma muvuge ibiranga urukiramende. Mugendeye ku mpande zarwo n'imfuruka zarwo.

#### Igikorwa cya 3

Mwitegereze ishusho muvuge ibiranga urukiramende.



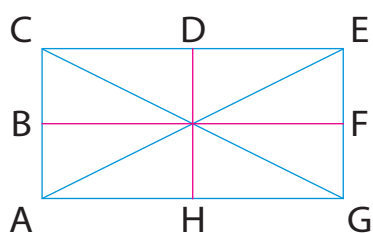
### Nsobanukiwe ko:

- Urukiramende ari ishushongero rigira impande 4. Ebyiri ebyiri ziteganye zingana (Uruhande AC = uruhande GE naho uruhande AG = uruhande CE).
- Impande ndende kurusha izindi z'urukiramende zitwa uburebure.
- Uruhande AC n'uruhande GE ni uburebure bw'urukiramende ACEG
- Impande ngufi kurusha izindi z'urukiramende zitwa ubugari.
- Uruhande AG n'uruhande CE ni ubugari bw'urukiramende ACEG
- Urukiramende rugira imfuruka 4 zigororotse.
- Urukiramende rugira ingwagati 2 zingana (BF) na (HD)
- Urukiramende rugira impuzampembe 2 na zo zingana (AE) na (CG) ( ebyiri zinganya uburebure, n'izindi ebyiri zinganya ubugari)



### Nsuzuma ngusuzume

Mwitegereze uru rukiramende muvuge amazina y'imirongo



- |       |         |       |         |
|-------|---------|-------|---------|
| a) AC | ni ____ | e) AE | ni ____ |
| b) CG | ni ____ | f) HD | ni ____ |
| c) AG | ni ____ | g) GE | ni ____ |
| d) BF | ni ____ | h) FE | ni ____ |

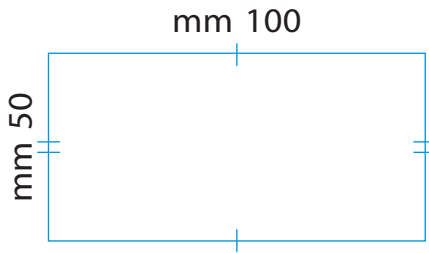


### Reka nisuzume

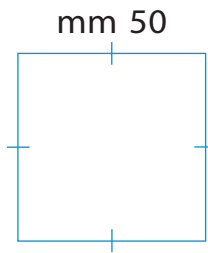
- 1) Mushushanye urukiramende rufite uburebure bwa cm 7 n'ubugari bwa cm 5 murushyiremo ingwagati n'impuzampembe.

2) Mu mashusho akurikira mugaragazemo urukiramende.

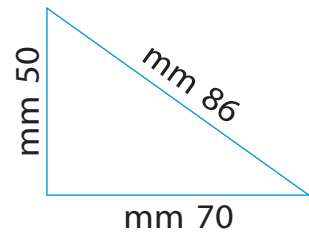
a)



b)



c)



### Imyitozo



- 1) Shaka ibintu bifite ishusho y'urukiramende mu ishuri
- 2) Kora amashusho y'urukiramende mu mpapuro cyangwa mu bikarito uyakate neza, uyamanike mu ishuri ryanyu
- 3) Vuga ibintu uzi bigira ishusho y'urukiramende.

### B. Gushaka umuzenguruko w'urukiramende

#### Igikorwa

- Mushushanye urukiramende rwa cm 20 z'uburebure na cm 10 z'ubugari
- Muruzengurutseho akagozi maze mugakate
- Mupime buri ruhande muteranye uburebure bw'impande zose uko ari 4
- Mupime n'uburebure bwa ka kagozi
- Musobanure ibyo mubonye.

#### Nsobanukiwe ko:

- Umuzenguruko w'urukiramende ungana n'igiteranyo cy'uburebure bw'impande zose.
- $\text{Umuzenguruko} = \text{Uburebure (L)} + \text{Uburebure (L)} + \text{Ubugari (I)} + \text{Ubugari (I)}.$
- $\text{Umuzenguruko} = \text{Uburebure (L)} + \text{Ubugari (I)} \times 2$

### Urugero:

Shaka umuzenguruko w'urukiramende rufite cm 56 z'ubugari na cm 74 z'uburebure.

| Ibyo mfite                              | Ibyo mbazwa  | Inzira n'igisubizo                                                                                              |
|-----------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------|
| Uburebure =<br>cm 74 Ubugari =<br>cm 56 | Umuzenguruko | Umuzenguruko =<br>$(L + l) \times 2$<br>Umuzenguruko:<br>$(\text{cm } 74 + \text{cm } 56) \times 2$<br>= cm 260 |



### Nsuzuma ngusuzume

Shaka umuzenguruko w'urukiramende rufite:

- Uburebure bwa cm 350 n'ubugari bwa cm 100
- Uburebure bwa cm 475 n'ubugari bwa cm 215
- Uburebure bwa cm 564 n'ubugari bwa 245
- Uburebure bwa cm 368 n'ubugari bwa cm 162



### Reka nisuzume

- Shaka umuzenguruko w'umurima ufite ishusho y'urukiramende rwa m 570 z'uburebure na m 450 z'ubugari.
- Shaka umuzenguruko w'urugi rw'igipangu rupima cm 750 z'uburebure na cm 250 z'ubugari

### Imyitozo

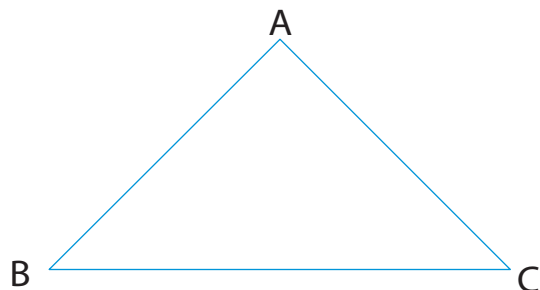
- Shaka umuzenguruko w'urukiramende rufite:
  - Uburebure bwa cm 124 n'ubugari bwa cm 98
  - Uburebure bwa cm 259 n'ubugari bwa cm 198
  - Uburebure bwa cm 412 n'ubugari bwa cm 395
- Shaka umuzenguruko w'ikibanza gifite ishusho y'urukiramende rwa m 63 z'uburebure na m 39 z'ubugari.
- Shaka umuzenguruko w'ameza yo mu ruganiriro apima cm 250 z'uburebure na cm 150 z'ubugari

## 11.3 Mpandeshatu

### A. Ibiranga mpandeshatu

#### Igikorwa cya 1

Mwitegereze ishusho muyiganireho muvuge ibiyiranga.



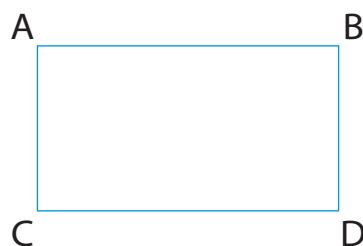
#### Nsobanukiwe ko:

Mpandeshatu ni ishushongerero rigizwe n'impande 3 n'imfuruka 3.

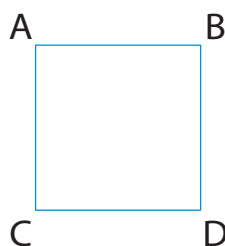
#### Igikorwa cya 2

Mu mashusho akurikira mugaragazemo mpandeshatu

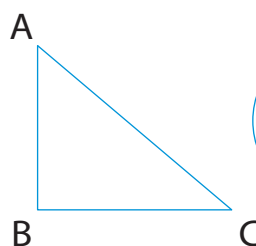
a)



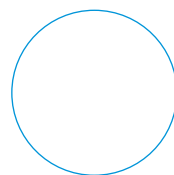
b)



c)



d)



#### Igikorwa cya 3

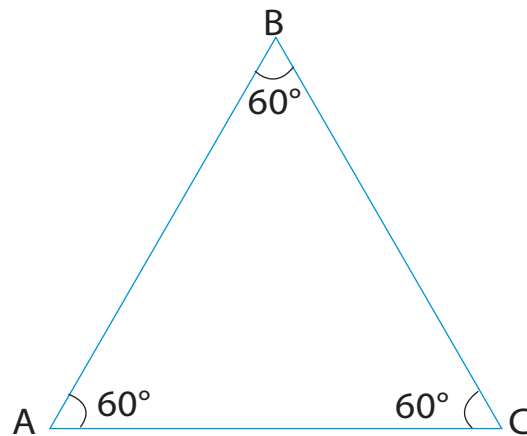
- Mushake ibintu bifite ishusho ya mpandeshatu mu ishuri ryanyu.
- Mukore amashusho ya mpandeshatu mu mpapuro cyangwa mu bikarito, muyakate neza, muyamanike mu ishuri ryanyu.
- Muvuge ibindi bintu muzi bigira ishusho ya mpandeshatu.

## B. Amoko ya mpandeshatu

### 1. Mpandeshatu ndinganire

#### Igikorwa cya 1

Mwitegereze iyi mpandeshatu, mupime impande n'imfuruka byayo maze muvuge ibiyiranga.



#### Nsobanukiwe ko:

Mpandeshatu ndinganire igira:

- Impande 3 zingana (Uruhande  $AB =$  Uruhande  $BD =$  Uruhande  $CA$ )
- Imfuruka 3 zingana imwe ipima dogere 60.
- Imfuruka zose za mpandeshatu ndinganire zipima dogere 180 ( $60^\circ \times 3 = 180^\circ$ )

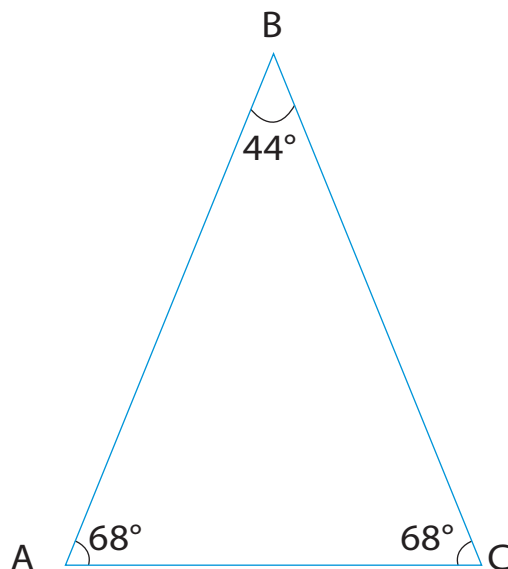
#### Igikorwa cya 2

- Mushake ibintu bifite ishusho ya mpandeshatu ndinganire biri mu ishuri ryanyu.
- Mukore amashusho ya mpandeshatu ndinganire mu mpapuro cyangwa mu bikarito, muyakate neza, muyamanike mu ishuri ryanyu.
- Muvuge ibindi bintu muzi bigira ishusho ya mpandeshatu ndinganire.

## 2. Mpandeshatu nyampanga

### Igikorwa cya 1

Mwitegereze iyi mpandeshatu, mupime impande n'imfuruka byayo maze muvuge ibiyiranga.



### Nsobanukiwe ko:

Mpandeshatu nyampanga igira:

- Impande 2 zingana (Uruhande  $AB =$  Uruhande  $BC$ )
- Imfuruka 2 zingana ( $BAC = BCA$ ).
- Igiteranyo k'imfuruka zose za mpandeshatu ni dogere 180.

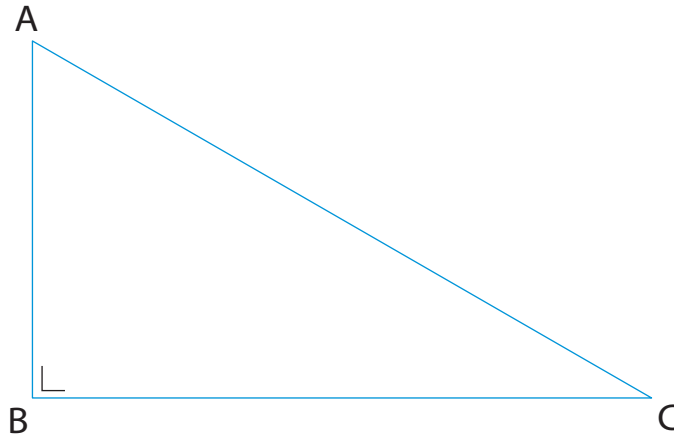
### Igikorwa cya 2

- Mushake ibintu bifite ishusho ya mpandeshatu nyampanga biri mu ishuri ryanyu
- Mukore amashusho ya mpandeshatu nyampanga mu mpapuro cyangwa mu bikarito, muyakate neza, muyamanike mu ishuri ryanyu
- Muvuge ibindi bintu muzi bigira ishusho ya mpandeshatu nyampanga.

### 3. Mpandeshatu nyanguni

#### Igikorwa cya 1

Mwitegereze iyi mpandeshatu, mupime impande n'imfuruka byayo maze muvuge ibiyiranga.



#### Nsobanukiwe ko:

Mpandeshatu nyanguni igira:

- Impande 3 zitangana
- Imfuruka 1 igororotse n'imfuruka 2 zifunganye
- Igiteranyo k'imfuruka zose za mpandeshatu ni dogere 180.

#### Igikorwa cya 2

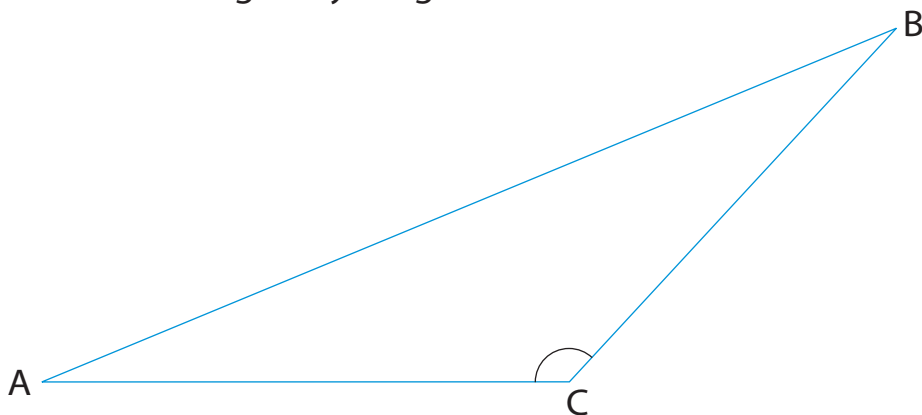
- Mushake ibintu bifite ishusho ya mpandeshatu nyanguni biri mu ishuri ryanyu.
- Mukore amashusho ya mpandeshatu nyanguni mu mpapuro cyangwa mu bikarito, muyakate neza, muyamanike mu ishuri ryanyu.
- Muvuge ibindi bintu muzi bigira ishusho ya mpandeshatu nyanguni.



#### 4. Mpandeshatu ibonetse yose

##### Igikorwa cya 1

Mwitegereze iyi mpandeshatu, mupime impande n'imfuruka byayo maze muvuge ibiyiranga.



##### Nsobanukiwe ko:

Mpandeshatu ibonetse yose igira:

- Impande 3 zitangana
- Imfuruka 1 yagutse n'imfuruka 2 zifunganye
- Igiteranyo k'imfuruka zose za mpandeshatu ni dogere 180.

##### Igikorwa cya 2

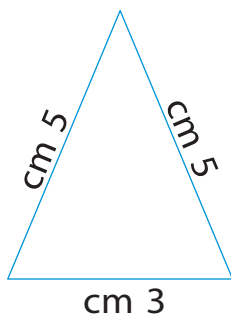
- Shaka ibintu bifite ishusho ya mpandeshatu ibonetse yose biri mu ishuri ryanyu.
- Mukore amashusho ya mpandeshatu ibonetse yose mu mpapuro cyangwa mu bikarito, muyakate neza, muyamanike mu ishuri ryanyu.
- Vuga ibintu uzi bigira ishusho ya mpandeshatu ibonetse yose.



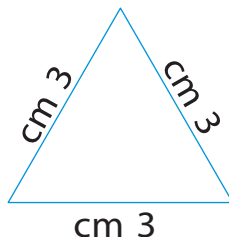
## Nsuzuma ngusuzume

Vuga amazina y'izi mpandeshatu

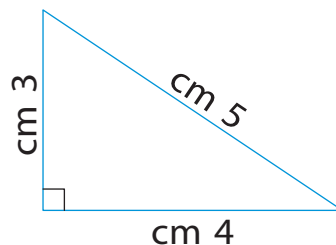
a)



b)



c)



## Reka nisuzume

Uzuza izi nteruro

- Igiteranyo k'imfuruka zose za mpandeshatu ni dogere \_\_\_\_
- Mpandeshatu ndinganire igira impande \_\_\_\_ zingana n'imfuruka \_\_\_\_ zingana.
- Imfuruka imwe yo muri mpandeshatu ndinganire ipima dogere \_\_\_\_
- Mpandeshatu igira impande ebyiri zingana yitwa \_\_\_\_
- Mpandeshatu \_\_\_\_ igira imfuruka imwe igororotse.
- Mpandeshatu nyampanga igira imfuruka \_\_\_\_ zingana.

## B. Umuzenguruko wa mpandeshatu

### Igikorwa

Mushushanye mpandeshatu mushatse, mupime buri ruhande rwayo, mwandike igipimo cyarwo, mubiteranye musobanure ibyo mubonye.

### Nsobanukiwe ko:

- Umuzenguruko wa mpandeshatu ungana n'igiteranyo cy'uburebure bw'impande 3 ziyigize.
- $\text{Umuzenguruko} = \text{Uruhande} + \text{Uruhande} + \text{Uruhande}$
- Umuzenguruko wa mpandeshatu ndinganire ungana n'uburebure bw'uruhande rumwe ukubye 3.  
 $\text{Umuzenguruko} = \text{Uruhande} \times 3$
- Uburebure bw'uruhande rwa mpandeshatu ndinganire bungana n'umuzenguruko wayo ugabanyije 3.  
 $\text{Uruhande} = \text{umuzenguruko} : 3$

### Urugero:

Shaka umuzenguruko wa mpandeshatu ifite impande zipima cm 145, cm 172 na cm 159

| Ibyo mfite                                                                                                                                       | Ibyo mbazwa  | Inzira n'igisubizo                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Uruhande rwa 1 ni cm 145</li><li>• Uruhande rwa 2 ni cm 172</li><li>• Uruhande rwa 3 ni cm 159</li></ul> | Umuzenguruko | <ul style="list-style-type: none"><li>• Umuzenguruko: Uruhande + uruhande + uruhande</li><li>• Umuzenguruko: cm 145 + cm 172 + cm 159 = cm 476</li></ul> |



### Nsuzuma ngusuzume

Mushake umuzenguruko wa mpandeshatu ifite impande zikurikira:

- cm 230, cm 250 na cm 350
- cm 150, cm 150 na cm 150
- dm 270, dm 270 na dm 110
- cm 75, cm 59 na cm 68



## Reka nisuzume



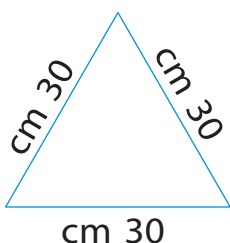
- 1) Shaka umuzenguruko wa mpandeshatu ndinganire ifite cm 97 z'uruhande.
- 2) Shaka umuzenguruko w'umurima ufite ishusho ya mpandeshatu ndinganire upima cm 195 z'uruhande.

## Imyitozo

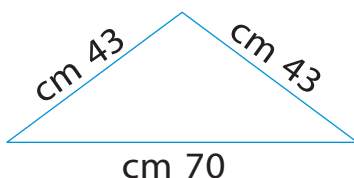


Shaka umuzenguruko w'izi mpandeshatu

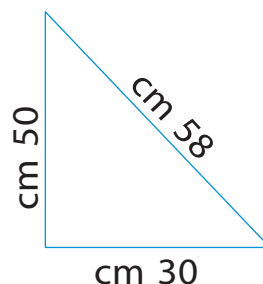
a)



b)



c)

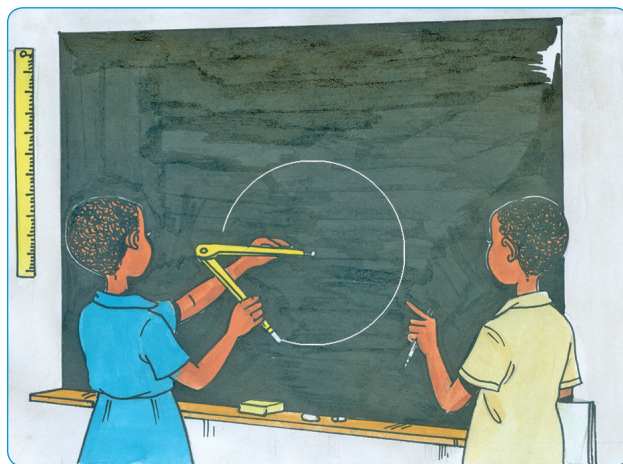


## 11.4 Uruziga

### 1. Ibiranga uruziga

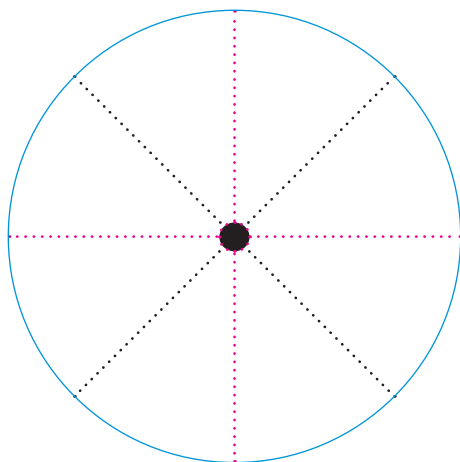
#### Igikorwa cya 1

Mwitegereze amashusho akurikira muvuge ibyo muyabonaho. Buri shusho ifite impande zingahe? Imfuruka zingahe?



## Igikorwa cya 2

Mwitegereze iyi shusho, muvuge izina ryayo n'ibiyiranga:

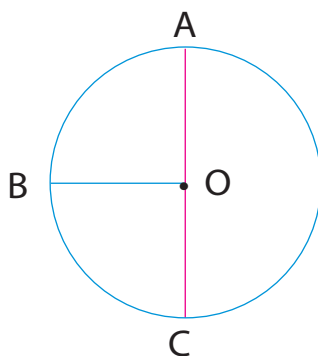


### Nsobanukiwe ko:

- Uruziga ari itsinda ry'utudomo turi ku ntera ingana uvuye mu izingiro.
- Iryo tsinda ry'utudomo ni ryo rikora umuzenguruko w'uruziga.
- Izingiro ni akadomo rwagati ko mu ruziga.

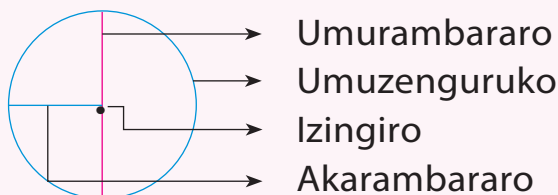
## Igikorwa cya 3

Mwitegereze mutahure ibigize uruziga munabisobanure.



### Nsobanukiwe ko:

- Akarambararo ni akarongo kagororotse kava mu izingiro kakagera ku murongo w'uruziga.
- Umurambararo ni umurongo ugororotse wambukiranya uruziga unyuze mu izingiro
- Umurambararo ungana n'akarambararo inshuro 2.
- Akarambararo kangana n'umurambararo ugabanyije 2.
- Izingiro ni ryo baheraho mu gushushanya uruziga. Umuzenguruko w'uruziga ni umurongo warwo ufunze.



### Igikorwa cya 4

Mushushanye uruziga mukoresheje agacaruziga.  
Musobanure uko mwabikoze.



#### Reka nisuzume

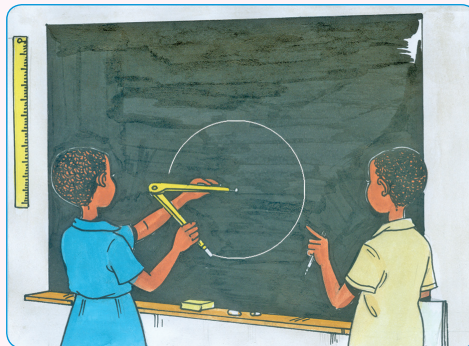
- 1) Shaka ibintu bifite ishusho y'uruziga biri mu ishuri ryawe.
- 2) Vuga ibindi uzi bifite ishusho y'uruziga
- 3) Uzuza izi nteruro
  - a) Umurambararo ni inshuro 2 z' \_\_\_\_
  - b) Akarambararo ni kimwe cya kabiri cy' \_\_\_\_
  - c) Inshuro 2 z'akarambararo ni \_\_\_\_
  - d) Akadomo ko hagati mu ruziga kitwa \_\_\_\_
  - e) Umurongo unyura mu izingiro ugabanyamo uruziga ibice 2 bingana witwa \_\_\_\_

### Nsobanukiwe ko:

Agacaruziga ari igikoresho gikoreshwa mu gushushanya uruziga.

Iyo ushushanya uruziga ukora ibi bikurikira:

- Ugenzura ko aho agacaruziga gafungiyeho hafunze neza.
- Ushyiramo ikaramu y'igiti ureshyeshya neza n'urushinge rw'agacaruziga warangiza ugafunga neza
- Wandika akadomo kaza kuba izingiro ry'uzuziga rwawe
- Ukoresha agacamurongo ugaca akarambararo k'uruziga
- Ushinga urushinge rw'agacaruziga kawe mu izingiro ry'uruziga rwawe.
- Ufungura agacaruziga kawe maze ugashyira ikaramu y'igiti ku mpera y'akarambararo kawe.
- Uzengurutse ya karamu y'igiti ushushanya uruziga ariko ugenzura ko urushinge rw'agacaruziga kawe rutavuye mu izingiro kugeza ugarutse aho wahereye.



### Nsuzuma ngusuzume

- Koresha agacaruziga ushushanye uruziga ugaragaze izingiro, akarambararo n'umurambararo warwo.
- Ca uruziga ruriho izingiro, akarambararo n'umurambararo ku mpapuro cyangwa ibikarito maze urumanike mu ishuri.

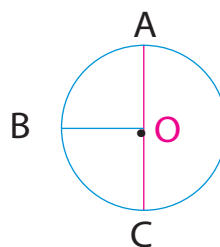
### Imyitozo



Itegereze uruziga usubize

Vuga amazina y'imirongo ikurikira:

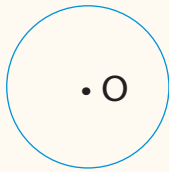
- |               |               |
|---------------|---------------|
| a) OD ni ____ | d) AC ni ____ |
| b) OB ni ____ | e) OE ni ____ |
| c) BE ni ____ | f) OA ni ____ |



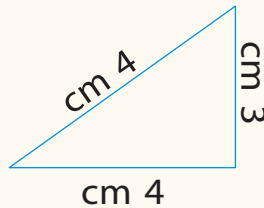
## 11.5 Isuzuma risoza umutwe wa 11

1) Itegereze amashusho akurikira, uvuge amazina yayo.

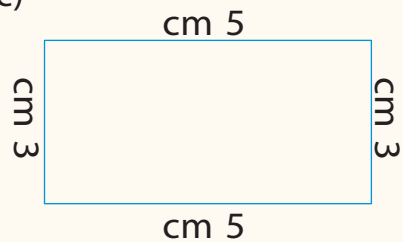
a)



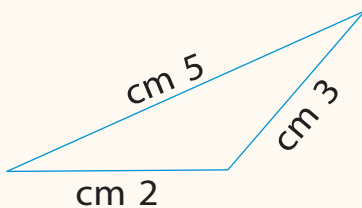
b)



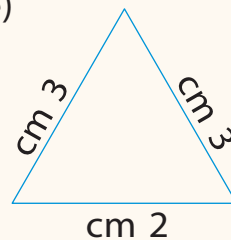
c)



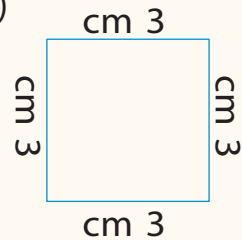
d)



e)



f)



2) Shushanya:

- a) Mpandeshatu ndinganire ifite uruhande rwa cm 16
- b) Kare ifite uruhande rwa cm 13
- c) Urukiramende rufite cm 10 z'ubugari na cm 20 z'uburebure
- d) Uruziga rufite cm 8 z'akarambararo

3) Shaka umuzenguruko wa :

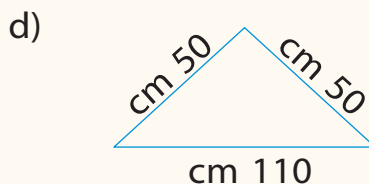
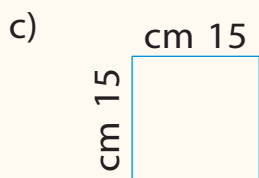
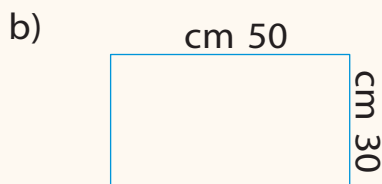
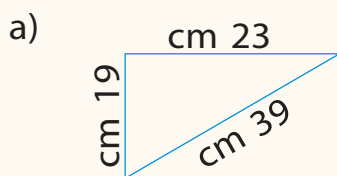
- a) Kare ifite cm 135 z'uruhande
- b) Urukiramende rufite cm 364 z'uburebure na cm 132 z'ubugari
- c) Mpandeshatu ifite impande zingana na cm 605, cm 235, cm 385

4) Subiza yego cyangwa oya

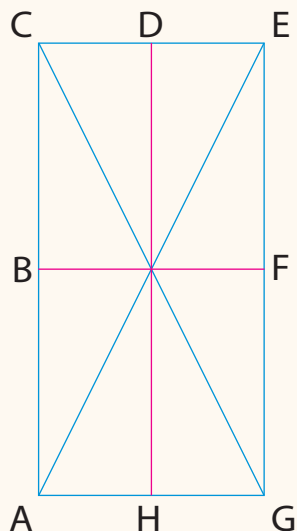
- a) Kare igira imfuruka zagutse
- b) Urukiramende rugira imfuruka zigororotse
- c) Akarambararo karuta umurambararo
- d) Izingiro ni akadomo rwagati ko mu ruziga.
- e) Mpandeshatu nyampanga igira impande 3 zingana.



5) Shaka umuzenguruko w'aya mashusho

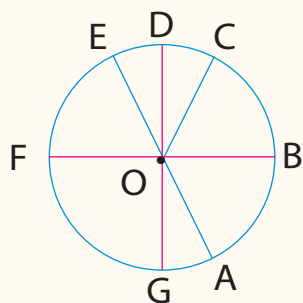


6) Itegereze ibi binyampande usubize



a) Vuga amazina y'imirongo n'ibinyampande bikurikira:

- 1) AC ni \_\_\_\_
- 2) CG ni \_\_\_\_
- 3) AG ni \_\_\_\_
- 4) BF ni \_\_\_\_
- 5) AEG ni \_\_\_\_
- 6) HD ni \_\_\_\_
- 7) GECA ni \_\_\_\_
- 8) CEA ni \_\_\_\_



b) Vuga amazina y'imirongo ikurikira

- |               |                |
|---------------|----------------|
| 1) AE ni ____ | 6) OA ni ____  |
| 2) OB ni ____ | 7) OF ni ____  |
| 3) FD ni ____ | 8) OE ni ____  |
| 4) OC ni ____ | 9) DG ni ____  |
| 5) OD ni ____ | 10) OG ni ____ |

## Ikinyatuzu



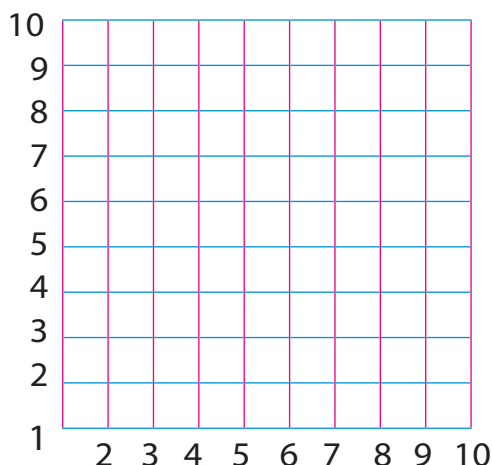
Habaye irushanwa ryo gushushanya ikinyatuzu hagashyirwamo ibinyampande nka kare cyangwa mpandeshatu. Uwahagarariye ishuri ryacu yikoreye utuzu gusa arekera aho. Sobanura ibyo atabashije gukora n'uko yari kubikora.



## 12.1 Ibiranga ikinyatuzu

## Igikorwa cya 1

Mwitegereze ikinyatuzu gikurikira, mukigane, muvuge ubwoko bw'imirongo icyubatse n'umubare wayo.



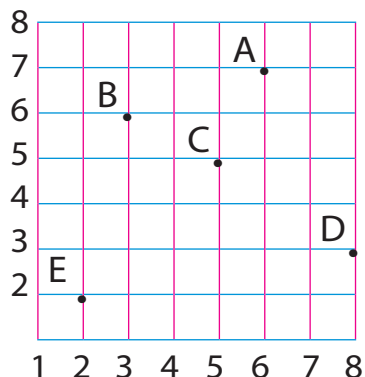
## Nsobanukiwe ko:

- Ikinyatuzu kigizwe n'imirongo ihagaze yitwa inkingi n'indi itambitse yitwa imbariro.
- Gushyira inomeru ku nkingi uhera ibumoso ujya iburyo.
- Gushyira inomeru ku mbariro uhera hasi ujya hejuru.

## 12.2 Kuranga akadomo mu kinyatuzu

### gikorwa cya 1

Mwitegereze iki kinyatuzu murange utudomo A, B, C, D na E



#### Urugero:

- Akadomo A kari ku nkingi ya 6 n'urubariro rwa 7  $\rightarrow A(6,7)$
- Akadomo B kari ku nkingi ya 3 n'urubariro rwa 6  $\rightarrow B(3,6)$

#### Nsobanukiwe ko:

- Ibirango by'akadomo mu kinyatuzu biba bigizwe n'imibare 2.
- Umubare wa mbere werekana inkingi, uwa kabiri werekana urubariro.



#### Nsuzuma ngusuzume

Mwubake ikinyatuzu kigizwe n'inkingi 6 n'imbariro 6

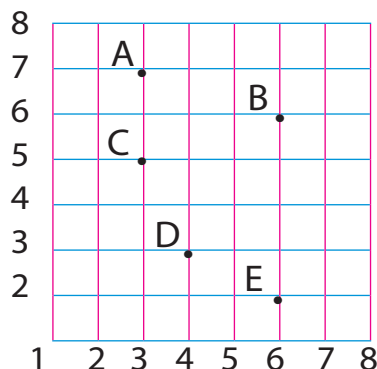
Mushyiremo utudomo: A (2, 4)

B (4, 3)

C (3, 2)

### Igikorwa cya 2

Murange utudomo turi mu kinyatuzu gikurikira







## Reka nisuzume

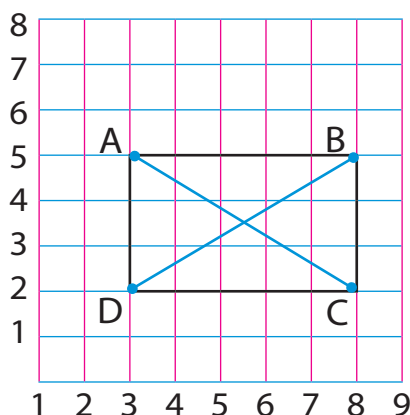


Shushanya ikinyatuzu ushaka, ushyiremo ishusho ya kare, hanyuma urange utudomo tugize impembe zayo.

### B. Gushushanya Urukiramende mu kinyatuzu

#### Igikorwa cya 1

Mwitegereze iki kinyatuzu musobanure uko cyubatswe, ibyo kerekana hanyuma mupime impande z'ishusho irimo, kandi muvuge ubwoko bwayo.



#### Igikorwa cya 2

Mushushanye ikinyatuzu kigizwe n'inkingi 9 n'imbariro 9 maze mushyiremo ibi bikurikira:

- Mushyire akadomo A ku nkingi ya 2 ku rubariro rwa 3
- Mushyire akadomo B ku nkingi ya 8 ku rubariro rwa 3
- Mushyire akadomo C ku nkingi ya 2 ku rubariro rwa 6
- Mushyire akadomo D ku nkingi ya 8 ku rubariro rwa 6
- Muhuze utudomo:      A na C                      D na B  
                                         C na D                      A na B
- Musobanure ibyo mubonye maze mupime impande z'ikinyampande mwashyizemo.
- Muvuge izina ry'ikinyampande mubonye.

### Nsobanukiwe ko:

Iyo ushushanya urukiramende mu kinyatuzu ukora ibi:

- Banza ushyire utudomo mu mahuriro y'inkingi n'imbariro baguhaye.
- Huza twatudomo wifashishije agacamurongo kugira ngo ubone ishusho wasabwe gushushanya.



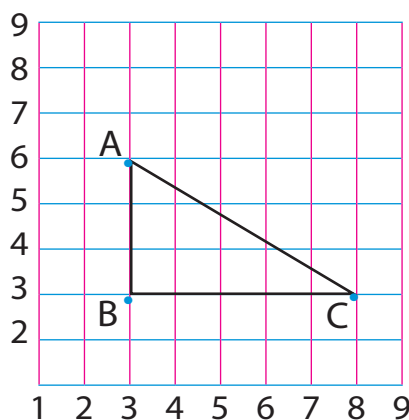
### Nsuzuma ngusuzume

Shushanya ikinyatuzu ushaka, ushyiremo ishusho y'urukiramende. Ranga utudomo tugize impembe zayo.

### C. Gushushanya mpandeshatu mu kinyatuzu

#### Igikorwa cya 1

Mwitegereze iki kinyatuzu musobanure uko cyubatswe, ibyo kerekana hanyuma muvuge ubwoko bw'ishusho irimo.



#### Igikorwa cya 2

Mushushyanye ikinyatuzu kigizwe n'inkingi 8 n'imbariro 8 maze mushyiremo ibi bikurikira:

- Mushyire akadomo A ku nkingi ya 6 ku rubariro rwa 6
- Mushyire akadomo B ku nkingi ya 2 ku rubariro rwa 6
- Mushyire akadomo C ku nkingi ya 2 ku rubariro rwa 2
- Muhuze akadomo A n'akadomo B

- Muhuze akadomo A n'akadomo C
- Muhuze akadomo C n'akadomo B
- Musobanure ibyo mubonye maze muvuge ubwoko bw'ishushongero mwashyizemo.

#### Nsobanukiwe ko:

Iyo ushushanya mpandeshatu mu kinyatuzu ukora ibi:

- Banza ushyire utudomo mu mahuriro y'inkingi n'imbariro baguhaye.
- Huza twatudomo wifashishije agacamurongo kugira ngo ubone ishusho wasabwe gushyiramo.



#### Reka nisuzume

- Shushanya ikinyatuzu k'inkingi 7 n'imbariro 7
- Ushyire akadomo A aho urubariro rwa 6 ruhurira n'inkingi ya 6
- Uhere kuri ako kadomo, ubare utundi tuzu 4 umanuka , ushyireho akadomo B
- Uhere kuri ako kadomo ubare utuzu 5 ujya ibumoso, ushyireho akadomo C.
- Uhuze utudomo C na B; B na A; C na A
- Uvuge izina rya mpandeshatu ubonye



#### Nsuzuma ngusuzume

Mushushanye ikinyatuzu gifite imbariro 10 n'inkingi 10.

Mushushanye mpandeshatu ihuza utu tudomo:

A (4, 6); B ( 2, 2); C ( 6, 2)

## Imyitozo



Mushushanye ibinyatuzu mushaka, mushyiremo amashusho:

- a) Urukiramende      b) Kare      c) Mpandeshatu  
d) Murange utudomo tugize impembe za buri shusho.

### Igikorwa cya 3

Muganire musobanura aho bakoresha ikinyatuzu mu buzima busanzwe

## 12.4 Isuzuma risoza umutwe wa 12

- 1) Itegereze iki kinyatuzu maze usubize

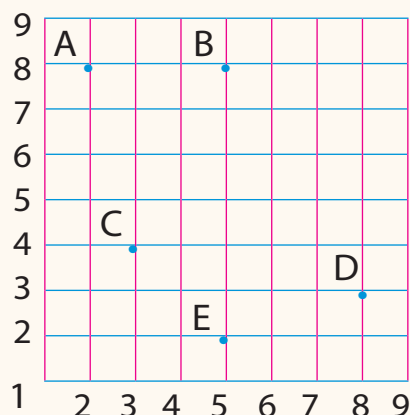
A (\_\_\_, \_\_\_)

B (\_\_\_, \_\_\_)

C (\_\_\_, \_\_\_)

D (\_\_\_, \_\_\_)

E (\_\_\_, \_\_\_)

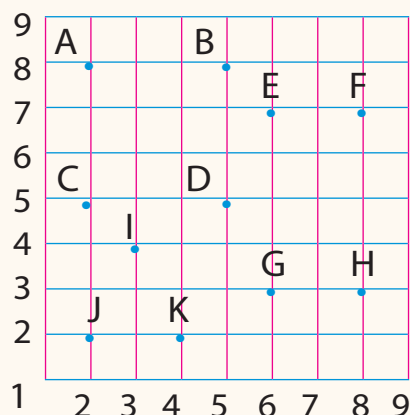


- 2) Vuga amashusho wabona uhuje utudomo ku buryo bukurikira:

a) A, B, C na D

b) E, F, G, H

c) I, J, K



- 3) Shushanya ikinyatuzu k'inkingi 7 n'imbariro 7 ushyiremo utudomo dukurikira: A (4, 3); B (2, 6); na C (5, 7). Huza utwo tudomo uvuge ishusho ubonye.



Umutwe wa

13

# Umubare ubura mu iteranya, ikuramo, ikuba, n'igabanya



Habayeho irushanwa Mugenzi na Ishimwe baratsinda. Babahitishamo gutwara amakayi 10 agura F 400 imwe cyangwa amakaramu 50 agura F 100 imwe. Mugenzi ahitamo amakaramu, Ishimwe ahitamo amakayi. Ni inde wahisemo ibifite agaciro? Sobanura.



## 13.1 Gutahura umubare ubura mu iteranya

### Igikorwa

Mutahure umubare ubura mukurikije urugero mwahawe

### Urugero:

$$\begin{array}{r} 1) \quad \begin{array}{r} 2 \cdot 5 \\ + 16 \cdot \\ \hline 398 \end{array} \quad \begin{array}{l} 5 + \cdot = 8 \longrightarrow 8 - 5 = 3 \\ \cdot + 6 = 9 \longrightarrow 9 - 6 = 3 \end{array} \longrightarrow \begin{array}{r} 235 \\ + 163 \\ \hline 398 \end{array}$$

$$\begin{array}{r} 2) \quad \begin{array}{r} \cdot 3 \cdot 5 \\ + 1 \cdot 6 \cdot \\ \hline 6 \ 579 \end{array} \quad \begin{array}{l} 5 + \cdot = 9 \longrightarrow 9 - 5 = 4 \\ \cdot + 6 = 7 \longrightarrow 7 - 6 = 1 \\ 3 + \cdot = 5 \longrightarrow 5 - 3 = 2 \\ \cdot + 1 = 6 \longrightarrow 6 - 1 = 5 \end{array} \longrightarrow \begin{array}{r} 5 \ 325 \\ + 1 \ 264 \\ \hline 6 \ 589 \end{array}$$

$$\begin{array}{r} a) \quad \begin{array}{r} 6 \ 3 \cdot 7 \\ + \cdot \cdot 4 \cdot \\ \hline 8 \ 749 \end{array} \end{array}$$

$$\begin{array}{r} b) \quad \begin{array}{r} \cdot 8 \cdot 5 \\ + \cdot 1 \cdot 4 \\ \hline 8 \ 049 \end{array} \end{array}$$

$$\begin{array}{r} c) \quad \begin{array}{r} 4 \cdot 8 \cdot \\ + \cdot 5 \cdot 1 \\ \hline 9 \ 898 \end{array} \end{array}$$

### Nsobanukiwe ko:

- Ufata igiteranyo ukavanamo umubare baguhaye.
- Ikinyuranyo ubonye ni wo mubare uba ubura mu iteranya.



### Nsuzuma ngusuzume

$$\begin{array}{r} \text{a)} \quad 7 \cdot 8 \cdot \\ + \cdot 1 \cdot 2 \\ \hline 8 \ 796 \end{array}$$

$$\begin{array}{r} \text{b)} \quad 2 \cdot 43 \\ + 13 \cdot 6 \\ \hline \cdot 75 \cdot \end{array}$$

$$\begin{array}{r} \text{c)} \quad \cdot 467 \\ + 4 \cdot \cdot \cdot \\ \hline 6 \ 798 \end{array}$$



### Reka nisuzume

$$\begin{array}{r} \text{a)} \quad 6 \cdot 4 \cdot \\ + \cdot 4 \cdot 2 \\ \hline 9 \ 745 \end{array}$$

$$\begin{array}{r} \text{b)} \quad 4 \cdot 67 \\ + \cdot 4 \cdot \cdot \\ \hline 6 \ 798 \end{array}$$

$$\begin{array}{r} \text{c)} \quad \cdot 456 \\ + 4 \ 5 \cdot \cdot \\ \hline 7 \cdot 79 \end{array}$$

## 13.2 Gutahura umubare ubura mu ikuramo

### Igikorwa

Mutahure umubare ubura mukurikije urugero mwahawe

#### Urugero:

|                                                                                          |                                                                                                           |                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\begin{array}{r} 1) \quad 6 \ 543 \\ - 3 \ 4 \cdot \cdot \\ \hline 3 \ 131 \end{array}$ | $\begin{array}{l} 3 - \cdot = 1 \rightarrow 3 - 1 = 2 \\ 4 - \cdot = 3 \rightarrow 4 - 3 = 1 \end{array}$ | $\begin{array}{r} \phantom{6} \phantom{5} \phantom{4} \phantom{3} \\ \phantom{6} \phantom{5} \phantom{4} 1 \ 1 \\ - 3 \ 4 \phantom{1} \phantom{1} \\ \hline 3 \ 1 \ 3 \ 2 \end{array}$ |
| $\begin{array}{r} 1) \quad 7 \cdot 3 \cdot \\ - 6 \ 211 \\ \hline 1 \ 320 \end{array}$   | $\begin{array}{l} \cdot - 1 = 0 \rightarrow 0 + 1 = 1 \\ \cdot - 2 = 3 \rightarrow 3 + 2 = 5 \end{array}$ | $\begin{array}{r} \phantom{7} \phantom{5} \phantom{3} \phantom{1} \\ 7 \ 5 \ 3 \ 1 \\ - 6 \ 2 \ 1 \ 1 \\ \hline 1 \ 3 \ 2 \ 0 \end{array}$                                             |

$$\begin{array}{r} \text{a)} \quad 9 \cdot 6 \cdot \\ - 8 \ 132 \\ \hline 1 \ 430 \end{array}$$

$$\begin{array}{r} \text{b)} \quad 4 \ 321 \\ - 2 \cdot 2 \cdot \\ \hline 2 \ 2 \cdot 1 \end{array}$$

$$\begin{array}{r} \text{c)} \quad 7 \ 767 \\ - 3 \cdot \cdot 5 \\ \hline 4 \ 322 \end{array}$$



### Nsuzuma ngusuzume

$$\begin{array}{r} \text{a)} \quad 2 \ 130 \\ - 1 \cdot 2 \cdot \\ \hline 1 \ 010 \end{array}$$

$$\begin{array}{r} \text{b)} \quad 6 \cdot \cdot 1 \\ - 3 \ 420 \\ \hline 3 \ 201 \end{array}$$

$$\begin{array}{r} \text{c)} \quad \cdot 456 \\ - 4 \cdot \cdot 5 \\ \hline 4 \ 321 \end{array}$$

### Nsobanukiwe ko:

Iyo ushaka umubare ubura mu ikuramo ukora ibi bikurikira:

- Iyo hari imibara ibura mu mubare ukurwamo, bafata uwo mu kinyuranyo bakongeraho uwo mu mubare ukurwamo.
- Iyo hari imibara ibura mu mubare ukurwamo bafata umubare ukurwamo bagakuramo uwo mu kinyuranyo.



### Reka nisuzume

$$\begin{array}{r} \text{a)} \quad 5 \cdot 5 \cdot \\ - 1321 \\ \hline 4635 \end{array}$$

$$\begin{array}{r} \text{b)} \quad 4597 \\ - 1 \cdot 8 \cdot \\ \hline 3215 \end{array}$$

$$\begin{array}{r} \text{c)} \quad 59 \cdot \cdot \\ - 1653 \\ \hline 4321 \end{array}$$

### Imyitozo

$$\begin{array}{r} \text{a)} \quad 6694 \\ - 13 \cdot \cdot \\ \hline 5320 \end{array}$$

$$\begin{array}{r} \text{b)} \quad 2799 \\ - \cdot \cdot \cdot \cdot \\ \hline 1540 \end{array}$$

$$\begin{array}{r} \text{c)} \quad \cdot \cdot \cdot \cdot \\ - 1452 \\ \hline 2321 \end{array}$$

## 13.3 Gutahura umubare ubura mu ikuba

### Igikorwa

Mukurikize urugero mwahawe mutahure umubare ubura

**Urugero:**  $7 \times \cdot = 1638 \rightarrow 1638 : 7 = 234 \rightarrow 7 \times 234 = 1638$

$$\begin{array}{r|l} 1638 & 7 \\ - 14 & 234 \\ \hline 023 & \\ - 21 & \\ \hline 028 & \\ - 28 & \\ \hline 00 & \end{array}$$

$$\text{a)} \quad 4 \times \cdot = 1000$$

$$\text{d)} \quad 9 \times \cdot = 5076$$

$$\text{b)} \quad \cdot \times 5 = 8050$$

$$\text{e)} \quad 8 \times \cdot = 6312$$

$$\text{c)} \quad \cdot \times 7 = 6615$$

$$\text{f)} \quad 6 \times \cdot = 5922$$

### Nsobanukiwe ko:

Iyo ushaka umubare ubura mu ikuba ufata igikubo ukakigabanya igikuba cyangwa igikubwa.



### Nsuzuma ngusuzume

$$\begin{array}{r} \cdot \cdot \cdot \cdot \\ \times 9 \\ \hline 1386 \end{array}$$

$$\begin{array}{r} \cdot \cdot \cdot \cdot \\ \times 8 \\ \hline 2592 \end{array}$$

$$\begin{array}{r} \cdot \cdot \cdot \cdot \\ \times 9 \\ \hline 4059 \end{array}$$



### Reka nisuzume

$$\begin{array}{r} \cdot \cdot \cdot \cdot \\ \times 7 \\ \hline 4788 \end{array}$$

$$\begin{array}{r} \cdot \cdot \cdot \cdot \\ \times 6 \\ \hline 2952 \end{array}$$

$$\begin{array}{r} \cdot \cdot \cdot \cdot \\ \times 5 \\ \hline 9780 \end{array}$$

### Imyitozo

$$\begin{array}{r} \cdot \cdot \cdot \cdot \\ \times 4 \\ \hline 9584 \end{array}$$

$$\begin{array}{r} \cdot \cdot \cdot \cdot \\ \times 3 \\ \hline 9867 \end{array}$$

$$\begin{array}{r} \cdot \cdot \cdot \cdot \\ \times 2 \\ \hline 9794 \end{array}$$

## 13.4 Gutahura umubare ubura mu igabanya

### Igikorwa

Mukurikize urugero mwahawe mutahure umubare ubura

### Urugero:

$$\text{a) } 450 : \cdot = 9 \longrightarrow 450 : 9 = 50$$

$$\text{b) } \cdot : 5 = 245 \longrightarrow 245 \times 5 = 1225$$

$$\text{a) } \cdot : 5 = 350$$

$$\text{d) } 147 : \cdot = 7$$

$$\text{g) } 9672 : \cdot = 3$$

$$\text{b) } 360 : \cdot = 4$$

$$\text{e) } \cdot : 6 = 91$$

$$\text{h) } 9819 : \cdot = 9$$

$$\text{c) } \cdot : 8 = 120$$

$$\text{f) } 225 : \cdot = 3$$

$$\text{i) } \cdot : 586 = 9$$

### Nsobanukiwe ko:

- Iyo umubare ubura ari ikigabanywa ufata ikigabanya ukagikuba ikigabanyo.
- Iyo umubare ubura ari ikigabanya ufata ikigabanywa ukagabanya ikigabanyo.



### Nsuzuma ngusuzume

a)  $648 : \bullet = 8$     b)  $729 : \bullet = 9$     c)  $847 : \bullet = 7$



### Reka nisuzume

a)  $\bullet : 6 = 45$     b)  $\bullet : 5 = 89$     c)  $\bullet : 4 = 125$

### Imyitozo

a)  $8795 : \bullet = 5$     b)  $\bullet : 9 = 818$     c)  $9534 : \bullet = 6$

## 13.5 Inshoza y'inganyagaciro n'ikimenyetso cya =

### A. Inganyagaciro mu iteranya

#### Igikorwa cya 1

Mwitegereze urugero muganire ku byakozwe.

#### Urugero:

|    |                           |                                         |
|----|---------------------------|-----------------------------------------|
| a) | $100 + 25 = 90 + \bullet$ | $\longrightarrow (100 + 25) - 90 = 35$  |
|    |                           | $\longrightarrow 100 + 25 = 90 + 35$    |
| b) | $45 + \bullet = 40 + 60$  | $\longrightarrow (40 + 60) - 45 = 55$   |
|    |                           | $\longrightarrow 45 + 55 = 40 + 60$     |
| c) | $75 + 30 = \bullet + 25$  | $\longrightarrow (75 + 30) - 25 = 80$   |
|    |                           | $\longrightarrow 75 + 30 = 80 + 25$     |
| d) | $\bullet + 90 = 270 + 80$ | $\longrightarrow (270 + 80) - 90 = 260$ |
|    |                           | $\longrightarrow 260 + 90 = 270 + 80$   |

#### Igikorwa cya 2

Mukurikize urugero mwahawe mu gikorwa cya 1 mutahure umubare ubura

|                               |                               |
|-------------------------------|-------------------------------|
| a) $80 + 30 = 50 + \bullet$   | c) $265 + 35 = 250 + \bullet$ |
| b) $150 + \bullet = 200 + 45$ | d) $479 + 51 = 350 + \bullet$ |



## Nsuzuma ngusuzume

a)  $913 + 97 = 803 + \bullet$

b)  $\bullet + 575 = 195 + 875$

c)  $\bullet + 597 = 987 + 519$

d)  $825 + 795 = \bullet + 658$

### Nsobanukiwe ko:

Iyo ushaka umubare ubura mu iteranya,

- Ufata imibare ibiri yatanzwe yegeranye ukayiteranya.
- Igiteranyo cyayo ukakivanamo umubare watanzwe uri wonyine.
- Ikinyuranyo ubona ni cyo wongerera kuri wa mubare maze ibiteranyo by'iyi mibare yombi bikaba bingana.



## Reka nisuzume

a)  $875 + \bullet = 1\,256 + 459$

b)  $\bullet + 1\,575 = 2\,145 + 875$

c)  $654 + 746 = \bullet + 598$

d)  $1\,208 + 726 = 576 + \bullet$

### Imyitozo

a)  $1\,758 + \bullet = 1\,526 + 954$

b)  $\bullet + 575 = 215 + 758$

c)  $1\,546 + 647 = \bullet + 985$

d)  $2\,801 + 1\,267 = 2\,567 + \bullet$

## B. Inganyagaciro mu ikuramo

### Igikorwa

Mukurikize urugero mwahawe mutahure umubare ubura.

### Urugero:

a)  $\bullet - 95 = 180 - 25$

→  $(180 - 25) + 95 = 250$

→  $250 - 95 = 180 - 25$

b)  $145 - \bullet = 175 - 65$

→  $175 - 65 = 110$

→  $145 - 110 = 35$

c)  $375 - 178 = \bullet - 265$

→  $(375 - 178) + 265 = 462$

→  $375 - 178 = 462 - 265$

a)  $235 - 45 = 540 - \bullet$

b)  $725 - \bullet = 600 - 10$

c)  $430 - 180 = 320 - \bullet$

d)  $978 - \bullet = 763 - 220$



### Nsuzuma ngusuzume

a)  $685 - 175 = 1380 - \bullet$

b)  $185 - \bullet = 485 - 375$

c)  $\bullet - 459 = 897 - 319$

d)  $\bullet - 975 = 1\,785 - 995$

### Nsobanukiwe ko:

Iyo ushaka umubare ubura mu ikuramo

- Ufata imibare ibiri yatanzwe yegeranye ukayikuramo.
- Ikinyuranyo cyayo ukacyongera ku mubare watanzwe uri wonyine.
- Hari n'isaba ko ubanza gukuramo imibare 2 yegeranye maze ikinyuranyo cyayo kikavanwa mu mubare uri wonyine mu kibazo.



### Reka nisuzume

a)  $456 - \bullet = 564 - 298$

b)  $975 - \bullet = 721 - 432$

c)  $\bullet - 345 = 856 - 534$

d)  $\bullet - 548 = 729 - 509$

### Imyitozo

a)  $765 - 348 = \bullet - 205$

b)  $1\,234 - 978 = \bullet - 725$

c)  $1\,567 - 1\,198 = 2\,018 - \bullet$

d)  $1\,453 - 832 = 1\,519 - \bullet$

## C. Inganyagaciro mu ikuba

### Igikorwa cya 1

Itegereze urugero usobanure ibyakozwe.

### Urugero:

a)  $6 \times 5 = \bullet \times 3 \longrightarrow 6 \times 5 = 30 \longrightarrow 30 : 3 = 10$

b)  $4 \times 12 = 8 \times \bullet \longrightarrow 4 \times 12 = 48 \longrightarrow 48 : 8 = 6$

c)  $3 \times \bullet = 20 \times 6 \longrightarrow 20 \times 6 = 120 \longrightarrow 120 : 3 = 40$

d)  $\bullet \times 9 = 45 \times 4 \longrightarrow 45 \times 4 = 180 \longrightarrow 180 : 9 = 20$

## Igikorwa cya 2

Mukurikize urugero mwahawe mutahure umubare ubura.

- a)  $9 \times 18 = 6 \times \dots$                       c)  $\cdot \times 7 = 49 \times 3$   
b)  $36 \times 4 = 9 \times \dots$                       d)  $\cdot \times 5 = 75 \times 8$



## Nsuzuma ngusuzume

- a)  $5 \times \cdot = 25 \times 8$                       c)  $88 \times 5 = \cdot \times 4$   
b)  $9 \times \cdot = 72 \times 3$                       d)  $98 \times 6 = \cdot \times 3$

## Nsobanukiwe ko:

Iyo ushaka umubare ubura mu ikuba:

- Ufata imibare ibiri yatanzwe yegeranye ukayikuba.
- Igikubo cyayo ukakigabanya n'umubare ukeneye uwo byikuba ngo bingane n'igikubo k'iyo ibiri.



## Reka nisuzume

- a)  $25 \times 8 = \cdot \times 2$                       c)  $125 \times 4 = \cdot \times 5$   
b)  $45 \times 8 = 6 \times \cdot$                       d)  $\cdot \times 9 = 27 \times 45$

## Imyitozo

- a)  $\cdot \times 7 = 35 \times 84$                       c)  $3 \times \cdot = 76 \times 9$   
b)  $105 \times 89 = 5 \times \cdot$                       d)  $5 \times \cdot = 138 \times 65$

## D. Inganyagaciro mu igabanya

### Igikorwa cya 1

Itegereze urugero usobanure ibyakozwe.

### Urugero:

- a)  $\cdot : 5 = 225 : 3 \longrightarrow 225 : 3 = 75 \longrightarrow 75 \times 5 = 375$   
b)  $120 : \cdot = 45 : 9 \longrightarrow 45 : 9 = 5 \longrightarrow 120 : 5 = 24$   
c)  $225 : 9 = \cdot : 8 \longrightarrow 225 : 9 = 25 \longrightarrow 25 \times 8 = 200$   
d)  $72 : 9 = 64 : \cdot \longrightarrow 72 : 9 = 8 \longrightarrow 64 : 8 = 8$



## Igikorwa cya 2

Mukurikize ingero mwahawe mutahure umubare ubura

- a)  $824 : 8 = \bullet : 4$                       c)  $945 : 9 = \bullet : 3$   
b)  $\bullet : 9 = 2016 : 4$                       d)  $\bullet : 7 = 2\,020 : 5$



### Nsuzuma ngusuzume

- c)  $636 : 6 = \bullet : 2$                       c)  $90 : \bullet = 100 : 10$   
b)  $81 : \bullet = 72 : 8$                       d)  $546 : 6 = \bullet : 5$

### Nsobanukiwe ko:

Iyo ushaka umubare ubura mu igabanya:

- Ufata imibare ibiri yatanzwe yegeranye ukayigabanya.
- Ikigabanyo cyayo ukagikuba n'umubare ukeneye uwo byigabanya ngo bingane n'ikigabanyo k'iyo ibiri.



### Reka nisuzume

- a)  $808 : 8 = \bullet : 4$                       c)  $918 : 9 = \bullet : 3$   
b)  $\bullet : 7 = 175 : 5$                       d)  $\bullet : 5 = 992 : 8$

### Imyitozo

- a)  $\bullet : 9 = 1950 : 6$                       c)  $2464 : 8 = \bullet : 9$   
b)  $\bullet : 8 = 436 : 4$                       d)  $12 : 4 = 9 : \bullet$

## 13.6 Gushaka umubare ubura mu rukurikirane rw'imibare

- A. Gushaka intera idahinduka yakoreshejwe mu rukurikirane rw'imibare ruhera ku mubare muto ruja ku mubare munini

### Igikorwa

Mwitegereze uko bashaka intera idahinduka yakoreshejwe mu rukurikirane rw'imibare hanyuma mukore imyitozo ikurikira.

### Urugero:

$$\begin{array}{l} \text{a) } 1\,250, 1\,300, 1\,350, 1\,400 \longrightarrow \frac{50}{(1300 - 1250)} = \\ \frac{50}{(1350 - 1300)} = \frac{50}{(1400 - 1350)} \text{ Intera idahinduka ni } 50 \end{array}$$

$$\begin{array}{l} \text{b) } 2\,400, 2\,500, 2\,600, 2\,700 \longrightarrow \frac{100}{(2500 - 2400)} = \\ \frac{100}{(2600 - 2500)} = \frac{100}{(2700 - 2600)} \text{ Intera idahinduka ni } 100 \end{array}$$

a) 855, 1 355, 1 855

b) 205, 505, 805, 1 105



### Nsuzuma ngusuzume

a) 1 005, 1 075, 1 145

b) 239, 300, 361, 422

### Nsobanukiwe ko:

Iyo ushaka intera idahinduka yakoreshejwe mu rukurikirane rw'imibare ruhera ku mubare muto rujya ku munini, ufata umubare wa kabiri ugakuramo umubare ubanza bityo bityo.



### Reka nisuzume

Shaka intera idahinduka yakoreshejwe muri uru rukurikirane.

a) 295, 333, 371, 409

b) 178, 299, 420, 541

### Imyitozo

Shaka intera idahinduka yakoreshejwe muri uru rukurikirane.

a) 397, 630, 863, 1096

b) 524, 700, 876, 1052

B. Gushaka intera idahinduka yakoreshejwe mu rukurikirane rw'imibare ruhera ku mubare munini rujya ku mubare muto

### Igikorwa cya 1

Itegereze urugero usobanure ibyakozwe.

### Urugero:

- a)  $324, 270, 216, 162 \rightarrow \frac{54}{(324 - 270)} = \frac{54}{(270 - 216)}$   
 $= \frac{54}{(216 - 162)}$  Intera idahinduka ni 54
- b)  $153, 125, 97, 72 = \rightarrow \frac{28}{(153 - 125)} = \frac{28}{(125 - 97)}$   
 $= \frac{28}{(97 - 72)}$  Intera idahinduka ni 28

### Igikorwa cya 2

Mukore imyitozo mukurikije urugero mwahawe.

- a) 2 456, 2 306, 2 156                      c) 4 032, 3 957, 3 882  
b) 1 890, 1 751, 1 612                      d) 2 476, 3 000, 3 524



### Nsuzuma ngusuzume

- a) 2 018, 1 653, 1 288, 923                      b) 956, 878, 800, 722

### Nsobanukiwe ko:

Iyo ushaka intera idahinduka yakoreshejwe mu rukurikirane rw'imibare ruhereye ku mubare munini ujya ku muto ufata umubare ubanza ugakuramo uwukurikiye bityo bityo.



### Reka nisuzume

Shaka intera idahinduka yakoreshejwe muri uru rukurikirane rw'imibare

- a) 756, 641, 526, 411                      b) 1 879, 1 811, 1 743

### Imyitozo

Shaka intera idahinduka yakoreshejwe muri uru rukurikirane rw'imibare:

- a) 1 519, 1 470, 1 421                      c) 789, 691, 593, 495  
b) 976, 937, 898, 859

### C. Kuzuza imibare ibura mu rukurikirane rw'imibare

#### Igikorwa cya 1

Itegereze urugero usobanure ibyakozwe.

#### Urugero:

- a) 150, 850, 1 550, **2 250, 2 950, 3 650**  
Intera idahinduka ni  $850 - 150 = 700$
- b) 125, 250, 375, **500, 625, 750**  
Intera idahinduka ni  $250 - 125 = 125$
- c) 475, 400, 325, **250, 175, 100**  
Intera idahinduka ni  $475 - 400 = 75$
- d) 1249, 949, **649, 349, 49**  
Intera idahinduka ni  $1249 - 949 = 300$

#### Igikorwa cya 2

Mwitegereze uko buzuzwa urukurikirane rw'imibare hanyuma mukore imyitozo.

- a) 3 456, 3 567, 3 678, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- b) 4 256, 4 365, 4 474, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- c) 1 994, 2 018, 2 042, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_



#### Nsuzuma ngusuzume

- a) 1 897, 1 950, 2 003, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- b) 7 564, 6 614, 5 664, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

#### Nsobanukiwe ko:

Iyo wuzuzwa urukurikirane rw'imibare ubanza gushaka intera idahinduka yakoreshejwe hanyuma ukagenda uyongeraho cyangwa uyikuraho bitewe n'uko imibare itondetse.



## Reka nisuzume



Uzuza imibare ibura muri uru rukurikirane rw'imibare

- a) 4 000, 4 500, 5 000, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
 b) 3 480, 3 505, 3 530, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

## Imyitozo



- a) 5 469, 4 679, 3 889, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
 b) 4 325, 3 875, 3 425, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

## 13.7 Isuzuma risoza umutwe wa 13

1) Tahura imibare ibura

- |    |                                                                                  |    |                                                                               |    |                                                                                  |    |                                                                               |
|----|----------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------|
| a) | $\begin{array}{r} 1\ 787 \\ + 6\ 010 \\ \hline 7\ 899 \end{array}$               | b) | $\begin{array}{r} \cdot \cdot \cdot \\ \times 9 \\ \hline 2\ 187 \end{array}$ | c) | $\begin{array}{r} 4\ 3\cdot\cdot \\ + \cdot\cdot41 \\ \hline 8\ 296 \end{array}$ | d) | $\begin{array}{r} \cdot \cdot \cdot \\ \times 8 \\ \hline 1\ 264 \end{array}$ |
| e) | $\begin{array}{r} 7\cdot\cdot6 \\ - 1\ 534 \\ \hline \cdot\ 42\cdot \end{array}$ | f) | $\begin{array}{r} \cdot \cdot \cdot \\ \times 6 \\ \hline 1\ 074 \end{array}$ | g) | $\begin{array}{r} 2\ 9\cdot\cdot \\ - 1\ 376 \\ \hline 1\ 611 \end{array}$       |    |                                                                               |
| h) | $\cdot : 4 = 903$                                                                |    |                                                                               | j) | $\cdot : 2 = 839$                                                                |    |                                                                               |
| i) | $\cdot : 5 = 315$                                                                |    |                                                                               | k) | $\cdot : 6 = 221$                                                                |    |                                                                               |

2) Uzuza izi nganyagaciro n'umubare ubura

- |    |                           |    |                                 |
|----|---------------------------|----|---------------------------------|
| a) | $100 + 50 = 80 + \cdot$   | d) | $9 \times 8 = 18 \times \cdot$  |
| b) | $525 - \cdot = 400 - 75$  | e) | $25 \times 2 = 60 \times \cdot$ |
| c) | $978 - \cdot = 763 - 220$ | f) | $728 : 8 = \cdot : 4$           |

3) Shaka intera idahinduka yakoreshejwe muri uru rukurikirane rw'imibare

- |    |                   |    |               |
|----|-------------------|----|---------------|
| a) | 234, 215, 196     | d) | 467, 431, 395 |
| b) | 745, 1 000, 1 255 | e) | 945, 882, 819 |
| c) | 834, 755, 676     | f) | 689, 713, 737 |

4) Uzuza uru rukurikirane rw'imibare

- a) 1 250, 1 750, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
 b) 3 400, 3 100, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
 c) 2 525, 3 025, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

# Ibishushanyo byifashishwa mu kubara



Twasuye ikigo k'ibarurishamibare. Batwereka ibishushanyo bigaragaza imibare y'imodoka n'ubwoko bwazo byagenzuwe buri kwezi. Gatoki ahita avuga ko ari udutako. Ese wowe ubona hari icyo ibishushanyo biteye gutya bikwigisha mu mibare?



## 14.1 Igishushanyo kifashishwa hagaragazwa ingano y'ibintu

### Igikorwa cya 1

Mwitegereze iyi shusho murebe ibintu biriho maze muvuge umubare wabyo kuri buri tsinda ry'ibintu.

|    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 10 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |  |
| 9  |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |                                                                                      |  |
| 8  |  |                                                                                     |                                                                                     |  |                                                                                     |                                                                                      |  |
| 7  |  |  |                                                                                     |  |                                                                                     |                                                                                      |  |
| 6  |  |  |                                                                                     |  |  |                                                                                      |  |
| 5  |  |  |                                                                                     |  |  |  |  |
| 4  |  |  |  |  |  |  |  |
| 3  |  |  |  |  |  |  |  |
| 2  |  |  |  |  |  |  |  |
| 1  |  |  |  |  |  |  |  |

### Nsobanukiwe ko:

Mu kureba ingano y'ibintu ku gishushanyo ureba umubare uringaniye na byo.

### Igikorwa cya 2

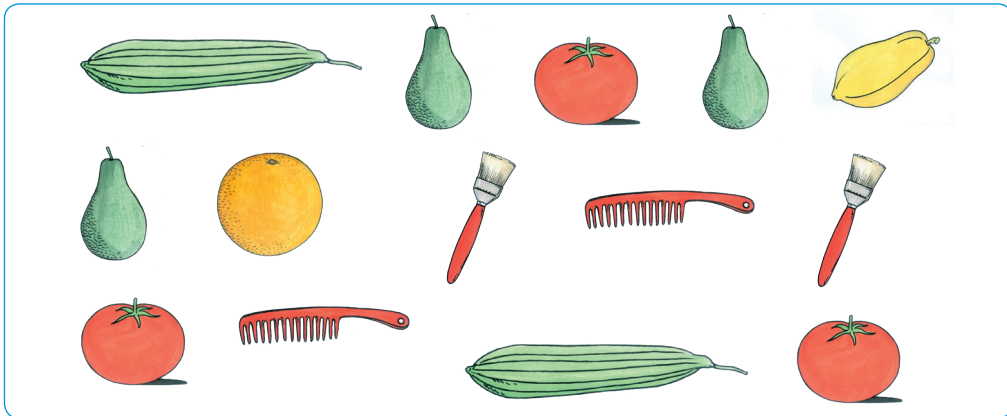
Mwitegereze ibintu biri kuri iki gishushanyo murebe imibare biringaniye muyivuge maze aho bigarukira mushyiremo ibara

|    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 12 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |    |                                                                                      |                                                                                       |
| 11 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |    |                                                                                      |    |
| 10 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |    |    |    |
| 9  |                                                                                     |                                                                                     |   |                                                                                     |   |    |    |
| 8  |                                                                                     |  |  |                                                                                     |  |  |  |
| 7  |                                                                                     |  |  |  |  |  |  |
| 6  |  |  |  |  |  |  |  |
| 5  |  |  |  |  |  |  |  |
| 4  |  |  |  |  |  |  |  |
| 3  |  |  |  |  |  |  |  |
| 2  |  |  |  |  |  |  |  |
| 1  |  |  |  |  |  |  |  |

## 14.2 Gukora amatsinda y'ibintu no kubyerekana ukoresheje igishushanyo

### Igikorwa

Mwitegereze aya mashusho muvungure ibintu biriho mubigaragaze ku gishushanyo.



|    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 11 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
| 10 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
| 9  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
| 8  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
| 7  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
| 6  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
| 5  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
| 4  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
| 3  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
| 2  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
| 1  |  |  |  |  |  |  |  |



## 14.3 Gusesengura ibishushanyo binyuranye byifashishwa mu mibare hagaragazwa ingano y'ibintu

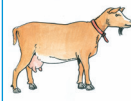
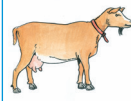
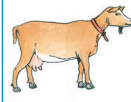
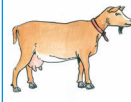
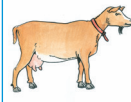
### Igikorwa

Mwitegereze ibishushanyo bikurikira muvuge ingano y'ibintu biriho.

A.

|   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|---|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 8 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |    |
| 7 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |    |                                                                                       |    |
| 6 |                                                                                     |    |                                                                                     |                                                                                     |    |                                                                                       |    |
| 5 |                                                                                     |  |  |                                                                                     |  |                                                                                       |  |
| 4 |  |  |  |  |  |                                                                                       |  |
| 3 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  |

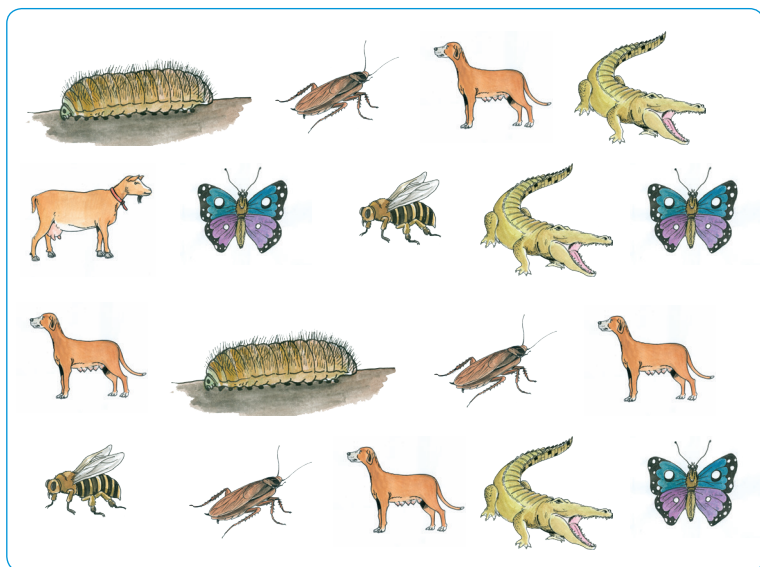
B.

|   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|---|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 9 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |    |
| 8 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |    |
| 7 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |    |                                                                                      |    |
| 6 |                                                                                     |    |                                                                                     |                                                                                     |    |                                                                                      |    |
| 5 |                                                                                     |    |    |                                                                                     |    |                                                                                      |    |
| 4 |                                                                                     |    |    |    |    |                                                                                      |    |
| 3 |  |  |  |  |  |                                                                                      |  |
| 2 |  |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  |

## 14.4 Gukora igishushanyo kifashishwa mu kubara uherye ku byatanzwe

### Igikorwa cya 1

Mukore igishushanyo kifashishwa mu kubara mugaragazeho ibintu bikurikira:



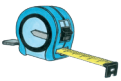
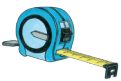
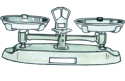
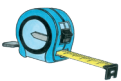
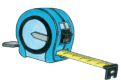
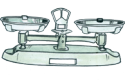
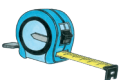
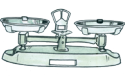
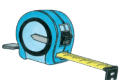
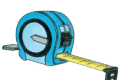
## Igikorwa cya 2

Mukore igishushanyo kifashishwa mu kubara mugaragazeho ibintu bikurikira:



## 14.5 Isuzuma risoza umutwe wa 14

- 1) Mushushanye ibikoresho 5 byo mu rugo bitandukanye. Mubishyire ku gishushanyo kigaragaza ingano y'ibyo mwahisemo, mukore amatsinda atandukanye y'ibikoresho bitanu buri tsinda.
- 2) Mushushanye ibikoresho 5 byo mu ishuri bitandukanye. Mubishyire ku gishushanyo kigaragaza ingano y'ibyo mwahisemo, mushyiremo amabara abigaragaza neza. Mukore amatsinda atandukanye y'ibikoresho.
- 3) Barura ibikoresho byo mu ishuri ufite maze werekane ingano yabyo wifashishije igishushanyo.
- 4) Mwitegereze ibishushanyo mubisesengure musobanure ibyo mwabonye:

|   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|---|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 7 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |    |                                                                                       |                                                                                       |
| 6 |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                       |                                                                                       |
| 5 |                                                                                     |  |  |                                                                                     |  |                                                                                       |                                                                                       |
| 4 |                                                                                     |  |  |  |  |                                                                                       |                                                                                       |
| 3 |  |  |  |  |  |                                                                                       |                                                                                       |
| 2 |  |  |  |  |  |  |                                                                                       |
| 1 |  |  |  |  |  |  |  |

## 15. Urugero rw'isuzuma risoza umwaka wa 3

A. Ibara n'amategako yaryo

1) Andika mu mibare cyangwa mu magambo

a) Ibihumbi ikenda magana atatu na cumi n'umunani:

b) 7 546:

c) Ibihumbi bitanu magana arindwi na mirongo ine na gatatu:

d) 6 978:

2) Andika imibare ikurikira mu mbonerahamwe y'ibara

a) 5 478

b) 7 231

c) 9 768

3) Andika umubare wasesenguwe

a)  $h\ 7\ j\ 6\ c\ 5\ b8 =$

b)  $h\ 9\ c\ 6\ b\ 7 =$

c)  $h\ 6\ j9\ c\ 3\ b4 =$

4) Gereranya ukoresheje  $<$ ,  $>$  na  $=$

a) 7 865  7 685

c) 8 798  8 798

b) 9 456  9 546

d) 5 798  5 987

5) Tondeka uhareye ku muto ujya ku munini

a) 5 768, 5 678, 5 786, 5 687

b) 8 769, 8 796, 8 976, 8 967

6) Tondeka uhareye ku munini ujya ku muto

a) 6 435, 6 354, 6 453, 6 345

b) 9 567, 9 675, 9 576, 9 657

7) Shaka igiteranyo

a)  $5\ 785 + 2\ 957 =$

b)  $4\ 678 + 5\ 099 =$

8) Shaka ikinyuranyo

a)  $9\ 123 - 7\ 987 =$

b)  $8\ 005 - 5\ 678 =$

c)  $7\ 234 - 6\ 789 =$

9) Shaka igikubo

a)  $82 \times 65 =$

b)  $154 \times 45 =$

c)  $256 \times 38 =$

10) Andika mu mahembe ugabanye

a)  $7\,896 : 4 =$       b)  $8\,469 : 9 =$       c)  $9\,891 : 7 =$

11) Uzuza n'imibare ibura

a)  $\bullet + 5\,678 = 9\,876$

b)  $8 \times \bullet = 6\,312$

c)  $8\,567 - \bullet = 2\,789$

d)  $9\,785 : \bullet = 5$

e)  $4\,567 + 3\,578 = \bullet + 5\,986$

f)  $6\,754 - \bullet = 7\,523 - 5\,398$

g)  $504 \times 8 = 9 \times \bullet$

h)  $\bullet : 5 = 7\,000 : 8$

12) Shaka intera idahinduka yakoreshejwe muri uru rukurikirane rw'imibare

a)  $987, 1\,092, 1\,197, 1\,302$

b)  $875, 780, 685, 590$

13) Uzuza uru rukurikirane rw'imibare n'imibare ibura

a)  $1\,543, 1\,474, 1\,405, 1\,336, \text{---}, \text{---}, \text{---}$

b)  $2\,675, 2\,500, 2\,325, 2\,150, \text{---}, \text{---}, \text{---}$

14) Uzuza iyi mbonerahamwe

|                                                                                     |   |   |   |   |   |   |   |   |   |   |    |
|-------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|----|
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| $\times 7$                                                                          |   |   |   |   |   |   |   |   |   |   |    |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| $\times 8$                                                                          |   |   |   |   |   |   |   |   |   |   |    |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| $\times 9$                                                                          |   |   |   |   |   |   |   |   |   |   |    |

15) Amahurizo

a) Gabanya ku buryo bungana inzitiramubu 9 875 Imirenge 5. Umurenge uzahabwa inzitiramibu zingahe?

b) Akagari ka Bibare gatuwe n'abagabo 1 368, abagore 1 579 n'abana 6 487. Ubwo ako kagari gatuwe n'abantu bangahe?

- c) Umurenge wacu wateye ingemwe z'intururu 8 764. Shaka umubare w' ingemwe zitameze niba 7 985 ari zo zameze gusa.
- d) Muri sitade ntoya harimo intebe 1 009 zicarwaho n'abantu 9 imwimwe. Shaka umubare w'abantu bakwirwa muri iyo sitade.
- B) Ingero n'amafaranga y'u Rwanda
- 1) Ni uruhe rugero fatizo rw'ingero:
- a) Z'uburebure c) Z'ibitembabuzi
- b) Z'uburemere
- 2) Hindura mu rugero wabajijwe
- a)  $\text{kg } 5 \text{ g } 80 = \text{dag } \underline{\hspace{1cm}}$  c)  $\text{m } 5 \text{ cm } 9 = \text{mm } \underline{\hspace{1cm}}$
- b)  $\text{l } 8 \text{ dl } 30 = \text{dl } \underline{\hspace{1cm}}$
- 3) Koresha imbonerahamwe yo guhindura ingero usubize
- a)  $\text{dl } 225 \times 8 = \text{l } \underline{\hspace{1cm}}$
- b)  $\text{km } 8 \text{ dam } 50 \times 6 = \text{hm } \underline{\hspace{1cm}}$
- c)  $\text{dag } 578 \times 5 = \text{hg } \underline{\hspace{1cm}}$
- d)  $\text{dl } 7 \text{ 200} : 9 = \text{l } \underline{\hspace{1cm}}$
- e)  $\text{km } 8 \text{ m } 4 : 6 = \text{m } \underline{\hspace{1cm}}$
- f)  $\text{kg } 7 \text{ dag } 7 : 7 = \text{g } \underline{\hspace{1cm}}$
- g)  $\text{dl } 80 + \text{ml } 120 = \text{l } \underline{\hspace{1cm}}$
- h)  $\text{hm } 75 + \text{dam } 2 \text{ 250} = \text{km } \underline{\hspace{1cm}}$
- i)  $\text{hg } 59 \text{ g } 8 + \text{dag } 286 = \text{g } \underline{\hspace{1cm}}$
- j)  $\text{hm } 9 \text{ m } 8 - \text{dam } 49 \text{ m } 9 = \text{m } \underline{\hspace{1cm}}$
- k)  $\text{dl } 68 - \text{ml } 3 \text{ 800} = \text{l } \underline{\hspace{1cm}}$
- l)  $\text{kg } 6 \text{ dag } 8 - \text{g } 5 \text{ 678} = \text{g } \underline{\hspace{1cm}}$
- 4) Subiza
- a) Inoti 9 za F 1 000 = F 2 000 + F  $\underline{\hspace{1cm}}$  + F  $\underline{\hspace{1cm}}$
- b) Ufashe inoti y'u Rwanda nini, ukongeraho intoya, ukongeraho ibiceri bibiri binini wagira F angahe?
- c) Bagutumye kg 1 y'isukari ya F 1 200, umugati wa F 900, umunyu wa F 400, isabune za F 950,

Kg 1 y'umuceri ya F 800 n'ifu y'igikoma ya F 1 500. Wagarura amafaranga angahe niba baguhaye inoti 2 za F 5 000?

5) Ni gihe ki?

a)



b)



6) Hindura izi ngero z'igihe:

- a) Imyaka 4 = Amezi \_\_\_\_
- b) Ibyumweru 8 = Iminsi \_\_\_\_
- c) Iminsi 30 = Amasaha \_\_\_\_
- d) Iminsi 35 = Ibyumweru \_\_\_\_

7) Sobanura itandukaniro riri hagati y'umwaka ugira iminsi 365 n'ugira iminsi 366.

8) Kagabo yatunze kg 2 700 z'ibirayi ku ngorofani abivana mu rugo abijyana ku isoko. Niba yarabitunze inshuro 9 ubwo buri nshuro yatwaraga kg zingahe?

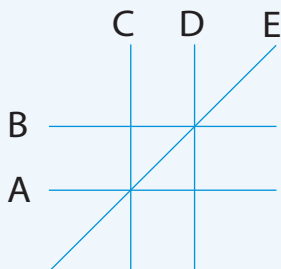
9) Mahoro afite utujerikani 8 tujyamo 5 kamwekamwe. Ubwo yose hamwe afite amazi angana iki?

10) Imyaka ikurikira izaba ifite iminsi ingahe?

- a) 2 018      b) 2 019      c) 2 020      d) 2 024

C. Amashushongero

1) Itegereze uvuge amazina y'imirongo iri ku ishusho:



- a) A B ni \_\_\_\_
- b) C B ni \_\_\_\_
- c) D E ni \_\_\_\_
- d) A E ni \_\_\_\_
- e) B E ni \_\_\_\_
- f) A D ni \_\_\_\_
- g) B D ni \_\_\_\_
- h) C D ni \_\_\_\_



2) Uzuza izi mbonerahamwe

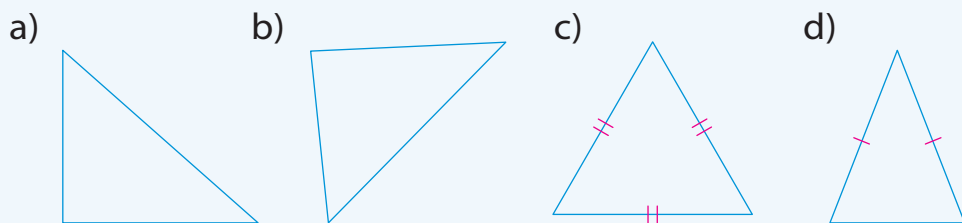
A) Kare

| Uruhande | Umuzenguruko |
|----------|--------------|
| cm 45    |              |
|          | cm 240       |
| cm 105   |              |
|          | cm 840       |
| cm 78    |              |
|          | cm 960       |
| cm 154   |              |

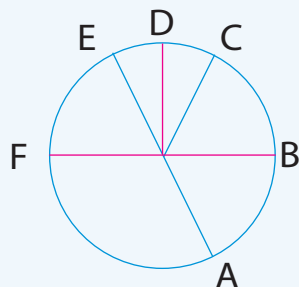
B) Urukiramende

| Uburebure | Ubugari | Umuzenguruko |
|-----------|---------|--------------|
| cm 75     | cm 54   |              |
| cm 23     | cm 17   |              |
| cm 56     | cm 43   |              |
| cm 87     | cm 67   |              |
| cm 93     | cm 79   |              |
| cm 36     | cm 25   |              |
| cm 69     | cm 47   |              |

3) Vuga amazina y'izi mpandeshatu

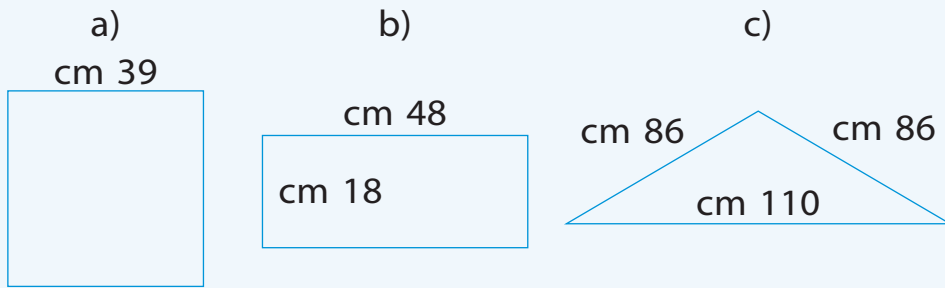


4) Vuga amazina y'imirongo iri kuri uru ruziga

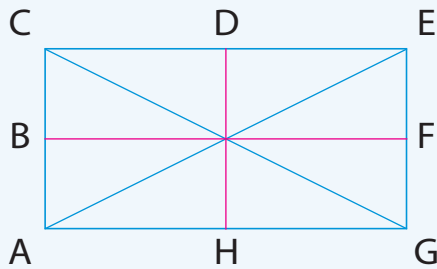


- |               |               |
|---------------|---------------|
| a) AE ni ____ | e) OD ni ____ |
| b) OB ni ____ | f) OA ni ____ |
| c) FD ni ____ | g) OF ni ____ |
| d) OC ni ____ | h) OE ni ____ |

- 5) Shaka umuzenguruko wa kare ifite cm 45 z'uruhande
- 6) Shaka umuzenguruko w'umurima ufite cm 89 z'ubugari na cm 121 z'uburebure.
- 7) Shaka umuzenguruko wa mpandeshatu ndinganire ifite cm 18 z'uruhande
- 8) Shaka umuzenguruko w'aya mashushongero



- 9) Itegereze uru rukiramende usubize



Vuga amazina y'imirongo ikurikira:

- |         |         |         |         |
|---------|---------|---------|---------|
| a) AC = | c) AG = | e) AE = | g) GE = |
| b) CG = | d) BF = | f) HD = | h) CE = |
- 10) Shushanya ikinyatuzu k'imbariro 8 n'inkingi 8:
    - a) Shyiramo utudomo A (3, 6) B (6, 7) C (3, 3) D (7, 3)
    - b) Vuga izina ry'ishusho ubonye
    - c) Pima imfuruka zayo
  - 11) Shushanya imfuruka ya dogere 60 n'iya dogere 135
  - 12) Ifashishe ibishushanyo bikoreshe mu mibare ugaragaze
 

|                        |                           |
|------------------------|---------------------------|
| a) Imipira 6 yo gukina | d) Inkweto 9              |
| b) Imodoka 7           | e) Imipira yo kwambara 10 |
| c) Amacunga            |                           |

## 16. Inyunguramagambo yo muri iki gitabo k'Imibare

Agacamurongo: Irati ikoze mu giti, mu cyuma cyangwa muri pulasitiki yifashishwa mu guca imirongo no gushushanya amashushongerero.

Agacaruziga: Igikoresho kifashishwa mu gushushanya uruziga

Akarambararo: Umurongo ugororotse uva mu izingiro ukagera ku muzenguruko w'uruziga.

Biruta: Ikimenyetso gikoreshwa mu igereranya iyo umubare ubanza ariwo munini (>)

Birutwa: Ikimenyetso gikoreshwa mu igereranya iyo umubare ubanza ariwo muto (<)

Dekametero: Urugero rw'uburebure / igikoresho kifashishwa mu gupima uburebure bw'umuhanda, ikibanza, umurima, ...

Gusesengura imibare: Kuvuga umwanya n'agaciro bya buri mubarwa ugize umubare

Gutondeka imibare: Gukurikiranya imibare uhereye ku muto ujya ku munini cyangwa uhereye ku munini ujya ku muto

Ibinyabumwe: Umwanya w'umubarwa utangira iburyo mu mibarwa igize umubare

Ibinyacumi: Umwanya w'umubarwa wa kabiri uhereye iburyo mu mibarwa igize umubare

Ibinyagihumbi: Umwanya w'umubarwa wa kane uhereye iburyo mu mibarwa igize umubare

Ibinyajana: Umwanya w'umubarwa wa gatatu uhereye iburyo mu mibarwa igize umubare

Ibitembabuzi: Ibintu byose bisukika nk'amazi.

Icyumweru: Igihe k'iminsi irindwi

Igabanya ridasagura: Uburyo bwo kugabanya bushyitse ntihagire igisigara

Igiciro: Amafaranga umucuruzi yifuza kugurisha igicuruzwa ke.

Igikuba: Umubare ukubishwa undi, mu ikuba ry'imibare  
 Igikubo: Igisubizo babona bakubye imibare  
 Igikubwa: Umubare ukubwa n'undi ngo haboneke igikubo  
 Igiteranyo: Igisubizo babona mu iteranya ry'imibare  
 Ikibara: Umubare uri hejuru y'umurongo w'umugabane  
 Ikigabanwa: Umubare ugabanywa  
 Ikigabanya: Umubare bagabanyisha  
 Ikigabanyo: Igisubizo babona mu igabanya ry'imibare  
 Ikinyatuzu: Igishushanyo kirimo utuzu dukozwe  
     n'imirongo ihagaze bita inkingi n'indi itambitse bita  
     imbariro  
 Ikinyuranyo: Igisubizo babona mu ikuramo ry'imibare  
 Ikita: Umubare uri muni y'umurongo w'umugabane  
 Ikizima: Umubare ushyitse cyangwa ikita kingana  
     n'ikibara  
 Imbariro: Imirongo igororotse ihagaze yifashishwa mu  
     kubaka ikinyatuzu  
 Imbonerahamwe y'ibara: Imbonerahamwe yifashishwa  
     mu gusesengura imibare  
 Imfuruka: Inguni ikorwa n'imirongo ibiri inyuranamo  
 Imfuruka ifunganye: Imfuruka iyo ari yo yose ipima  
     dogere ziri muni ya 90  
 Imfuruka igororotse: Imfuruka iyo ari yo yose ipima  
     dogere 90  
 Imfuruka yagutse: Imfuruka iyo ari yo yose ipima dogere  
     ziri hagati ya 90 na dogere 180  
 Imibarwa: Imibare igize umubare  
 Imigabane: Imibare igaragaza ibice byagabanijwe mu  
     kizima igira ikibara, ikita n'umurongo w'umugabane  
     utandukanya ikibara n'ikita  
 Imirongo: Urukurikirane rw'utudomo tugiye umujyo umwe  
 Imirongo inyuranamo: Imirongo ifite ibyerekezo  
     binyuranye kandi ihurira mu kado kamwe igakorana  
     imfuruka

Indangaminsi: Igikoresho kerekana iminsi, amatariki, ibyumweru, n’amezi bigize umwaka

Inganyagaciro: Imibare inganya agaciro bigaragajwe n’ikimenyetso cya bihwanye, kiri hagati yayo.

Ingeramfuruka: Igikoresho kifashishwa mu gupima imfuruka

Ingero z’igihe: Ingero zifashishwa mu kwerekana igihe

Ingero z’uburebure: Ingero zifashishwa mu gupima indeshyo y’ahantu, abantu cyangwa ibintu.

Ingero z’uburemere: Ingero zifashishwa mu gupima ingano y’ibintu

Inkingi: Imirongo igororotse ihagaze yifashishwa mu kubaka ikinyatuzu

Intera idahinduka: Intera ikoreshe mu rukurikirane rw’ibara rukozwe ku buryo budahinduka

Isaha: Igihe k’iminota mirongo itandatu.

Iteranya ribitsa: Iteranya rigira ibiteranyo by’imibarwa bigera cyangwa birenga 10

Iteranya ritabitsa: Iteranya rigira ibiteranyo by’imibarwa iri muni ya 10

Izingiro: Akadomo ko mu ruziga hagati kifashishwa mu gushushanya uruziga

Kare: Ikinyampande gifite impande enye zingana n’imfuruka enye zigororotse.

Kugereranya imibare: Kureba umunini n’umuto

Kuvunja: Guhinduza amafaranga mu yandi bihwanyije agaciro

Kuzigama: Kwiteganyiriza

Metero buhine: Metero ikunjwa, ihinahinwa

Metero bushumi: Metero iteye nk’agashumi

Mpandeshatu: Ishushongero rifite impande eshatu

Mpandeshatu ibonetse yose: Ishushongero rifite impande eshatu zose zitangana n’imfuruka 3 zitangana

Mpandeshatu ndinganire: Ishushongero rifite impande eshatu zingana

Mpandeshatu nyampanga: Ishushongero rifite impande eshatu n'imfuruka eshatu ariko ebyiri muri zo zingana

Mpandeshatu nyanguni: Ishushongero rifite impande eshatu ariko ebyiri muri zo zikora imfuruka igororotse

Nsuzuma ngusuzume: Ubwoko bw'isuzuma rikorwa n'abanyeshuri babiribabiri

Reka nisuzume: Ubwoko bw'isuzuma rikorwa n'umunyeshuri ku giti ke

Ukwezi: Igihe kingana n'ibyumweru 4 bigizwe n'iminsi 30, cyangwa 31, 28 cyangwa 29

Umunota: Igihe kingana n'amasegonda 60

Umunzani: Igikoresho cyo gupima ibiro by'ikintu cyangwa by'abantu

Umurambararo: Umurongo ugororotse uva ku muzenguruko w'uruziga ukanyura mu izingiro ry'uruziga ukongera ukagera ku muzenguruko

Umurongo ugororotse: Umurongo ugiye umujyo umwe

Umurongo w'umugabane: Umurongo utandukanya ikibara n'ikita

Umuzenguruko: Uburebure bungana n'intera izengurutse ishusho runaka cyangwa ahantu runaka

Umwaka udasanze: Umwaka ugira iminsi 366

Umwaka usanze: Umwaka ugira iminsi 365

Urukiramende: Ikinyampande gifite impande 4, ebyirebyiri ziteganye zingana n'imfuruka 4 zigororotse.

Urukurikirane rw'imibare: Imibare itondetse uherye ku muto, ujya ku munini cyangwa uherye ku munini ujya ku muto ariko hagati yayo harimo intera idahinduka (umubare ugenda wiyongerwaho cyangwa ukurwamo)

Uruziga: Ishushongero rigizwe n'umurongo ufunze uri ku ntera ingana uturutse mu izingiro.