

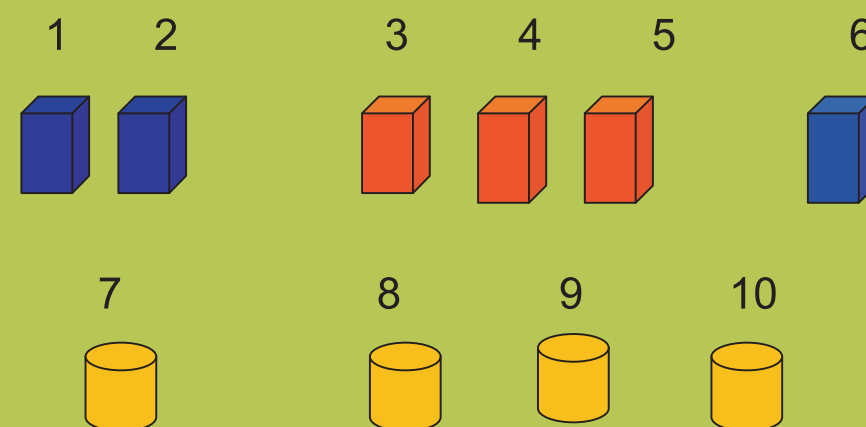
Mathaabu
Kîraci Kîa Mbere
Îbuku rîa Mûrutwa

ISBN 9966-00-210-3

Published by
BTL (E.A.)
P.O. Box 44456 Nairobi, Kenya



MATHAABU
KÎRACI KÎA MBERE
Îbuku rîa Mûrutwa



Mathematics
in Tharaka Language

MATHAABU

**ÎBUKU RÎA MÛRUTWA RÎA
KÎRACI KÎA MBERE**

Standard

1

Pupil's Book

**Mathematics
in Tharaka Language**

Written by: Tharaka MTE Writers' pane

Compiled by: Tharaka MTE staff

Edited by: Joseph Mbijiwe & Patrick Kanampiu

Illustrated by: Mukabi Mati, Joseck Mutethia,

Joseph Mbijiwe & Mutiria Cingau

Cover Designer: P.N. Kanampiû

Layout Assistant: Janet Sweet

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Published by
Bible Translation & Literacy (E.A.)
P.O. Box 44456 Nairobi, Kenya
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Funded by:



PREFACE

This Standard 1 Mathematics Pupil's Book is written in accordance with the Standard One Syllabus by Kenya Institute of Education (KIE). The book is divided into 5 units. Each unit deals with a major topic. These 5 main topics that this book covers are: ***Numbers, Whole Numbers, Addition, Measurements*** and ***Geometry***. The topics are divided into sub-topics and the various topics are further sub-divided into lessons.

This book was written to help teachers in Tharaka lower primary schools in teaching Mathematics using Kĩitharaka as a medium of instruction. This is in line with the requirement of the Ministry of Education that pupils in lower primary schools learn in the language of the catchment area.

This book and others in this series are culturally relevant to Tharaka children. They are not only written in Kĩitharaka but they also use examples familiar to Tharaka children.

This is the pupil's book. There is a teacher's guide that has instructions to the teacher on how to disseminate the contents of this pupil's book to the learners.

I would like to appreciate and acknowledge the contribution by various partners in developing this book and others in the Kĩitharaka series. Among these are the Tharaka MTE Writers Panel, comprising:

Education Officers - Mr. Joseph Mwenda, Mr. Alex Kanampiu, Mrs. Ann Kieria, Mr. Peter K. Muchiri and Mr. Onesmus Mitambo;

Primary School Teachers - Mr. Muthengi Gaichu, Mr. Isaiah Gwatia, Mrs. Grace Ngoci, Mr. Isaiah Rubane, Mr. Gerald Murithi, Mr. Simon Kĩithirĩki, Mr. Moses Kirimi, Mrs. Eunice Mayira, Ms. Tabitha Munda, Mrs. Esther Karauki, Mr. Ginson Miriti, Mrs. Jennifer Makia, Mr. Delfino M. Mwaria, Mr. Zaverio M. Rugia and Mr. Stephen K. Murea;

BTL Tharaka staff, Tharaka South and Tharaka North District Education Officials, our funding partners, Bible Translation & Literacy (E.A.) and our other various partners.

I most sincerely thank all those who took part and gave all manner of support in the development of this book.

God bless you all,

Onesmus Kamwara

BTL Tharaka Project Leader

KÎMENYITHIA

Îbuku rîrî rîa Mathaabu rîa Kîraci Kîa Mbere rîandîkîitwe rîkîthiingatagîira sîrabasi ya Kîraci kîa Mbere ya Kenya Institute of Education (KIE). Rîgaûkanîitue icuncî bitaano. Na wa kîra gîcuncî kîrî na kîthoomo gîakîo. Ithoomo bira birî îbukuuni rîrî i: ***Naamba, Naamba Ciûyûrî, Kûriinganîra, Kûthima*** na ***Mîcooro***. Ithoomo bibi ibigaûkanîitue biauma reeconi inyiingî.

Îbuku rîrî rîandîkirwe rîa gûteetheeria aarimû ba iraci bia mwambîirio bia cukuru cia Tharaka kûrutana bagîtûmagîra rwaria rwa Kîitharaka. Ûgu i kûriingana na watho bwa rwong'î rwa Kîthoomo atî aana ba iraci bia mwambîirio babatîirue barutanwa na rwaria rûra rwaragua n'antû ba bantû agu cukuru îrî.

Îbuku rîrî na mara mangî marî mûbangooni ûyû ma Kîitharaka maandîkîitwe bûra mwana wa Tharaka aûmba kûmeerewa bwega mûno. Maandîkîitwe na rwaria rwa Kîitharaka na magîtûmagîra ngerekano ira antû ba Tharaka bamenyanîritie nacio.

Rîrî n'îbuku rîa mûrutwa. Kûrî na îbuku rîa mwarimû rîra rîrî na mataaro kîrî mwarimû ma kûmwonia bûra aûmba kûrutana mantû mara marî îbukuuni rîrî .

Ingûcookia nkaatho kîrî antû bara bateetheereetie kwandîka îbuku rîrî na Mabuku mara mangî ma mûbango ûyû wa Kîitharaka. Nabo i bo; Gîkundi kîa aandîki ba Kîitharaka, nabo n'amwe na:

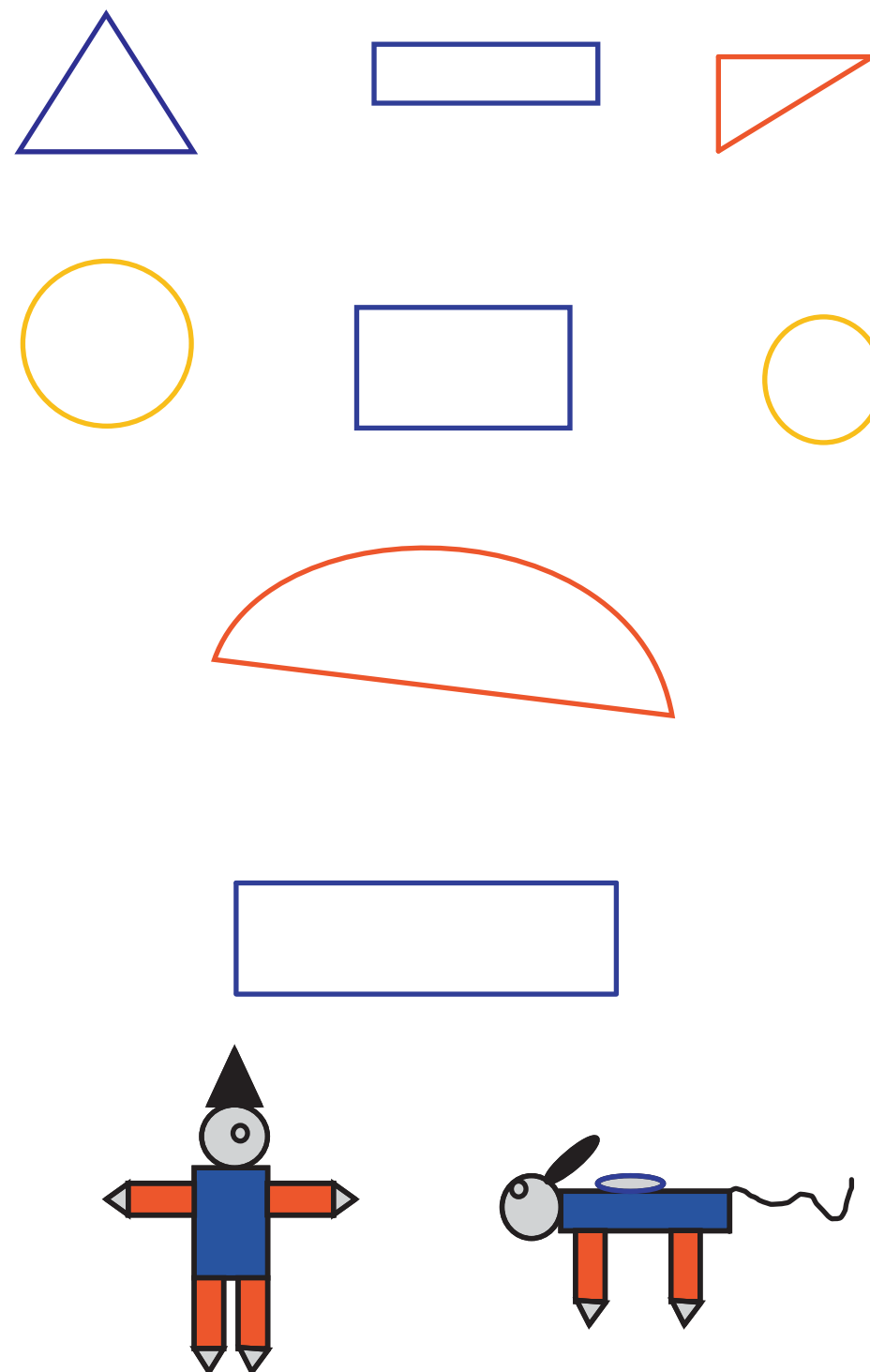
anene ba kîthoomo - Mr. Joseph Mwenda, Mr. Alex Kanampiu, Mrs. Ann Kieria, Mr. Peter K. Muchiri na Mr. Onesmus Mitambo;

aarimû - Mr. Muthengi Gaichu, Mr. Isaiah Gwatia, Mrs. Grace Ngoci, Mr. Isaiah Rubane, Mr. Gerald Murithi, Mr. Simon Kithiriki, Mr. Moses Kirimi, Mrs. Eunice Mayira, Ms. Tabitha Munda, Mrs. Esther Karauki, Mr. Ginson Miriti, Mrs. Jennifer Makia, Mr. Delfino M. Mwaria, Mr. Zaverio M. Rugia na Mr. Stephen K. Murea;

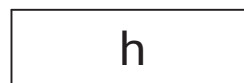
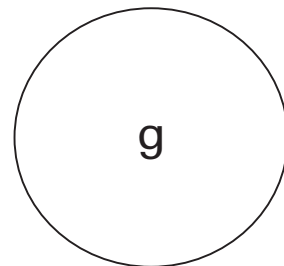
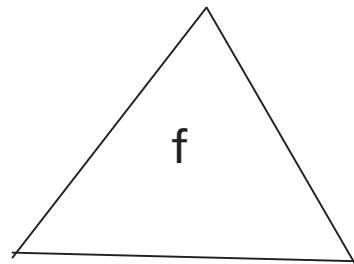
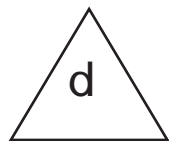
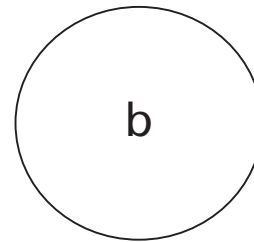
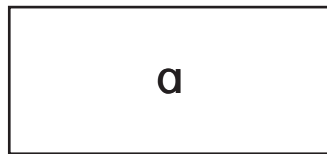
aruti ngûgî ba BTL Tharaka, anene ba kîthoomo ndeeni ya dicitirîti ya Tharaka ya neegûrû na ya naiti, antû bara bateethagîiria na mbia, BTL na bangî baingî. Ingûcookeria antû bonthe bara bateetheereetie na nîra mwanya mwanya, wandikî bwa îbuku rîrî nkaatho inyiingî mûno.

Ngai abûthaarime bwinthe,

Onesmus Kamwara
BTL Tharaka Project Leader



Gweta mariĩtwa ma mĩcooro ĩno.



FOREWORD

For the last ten years Bible Translation and Literacy (BTL) has partnered with the Government of Kenya in implementing Mother Tongue Education (MTE) in schools among the Tharaka community.

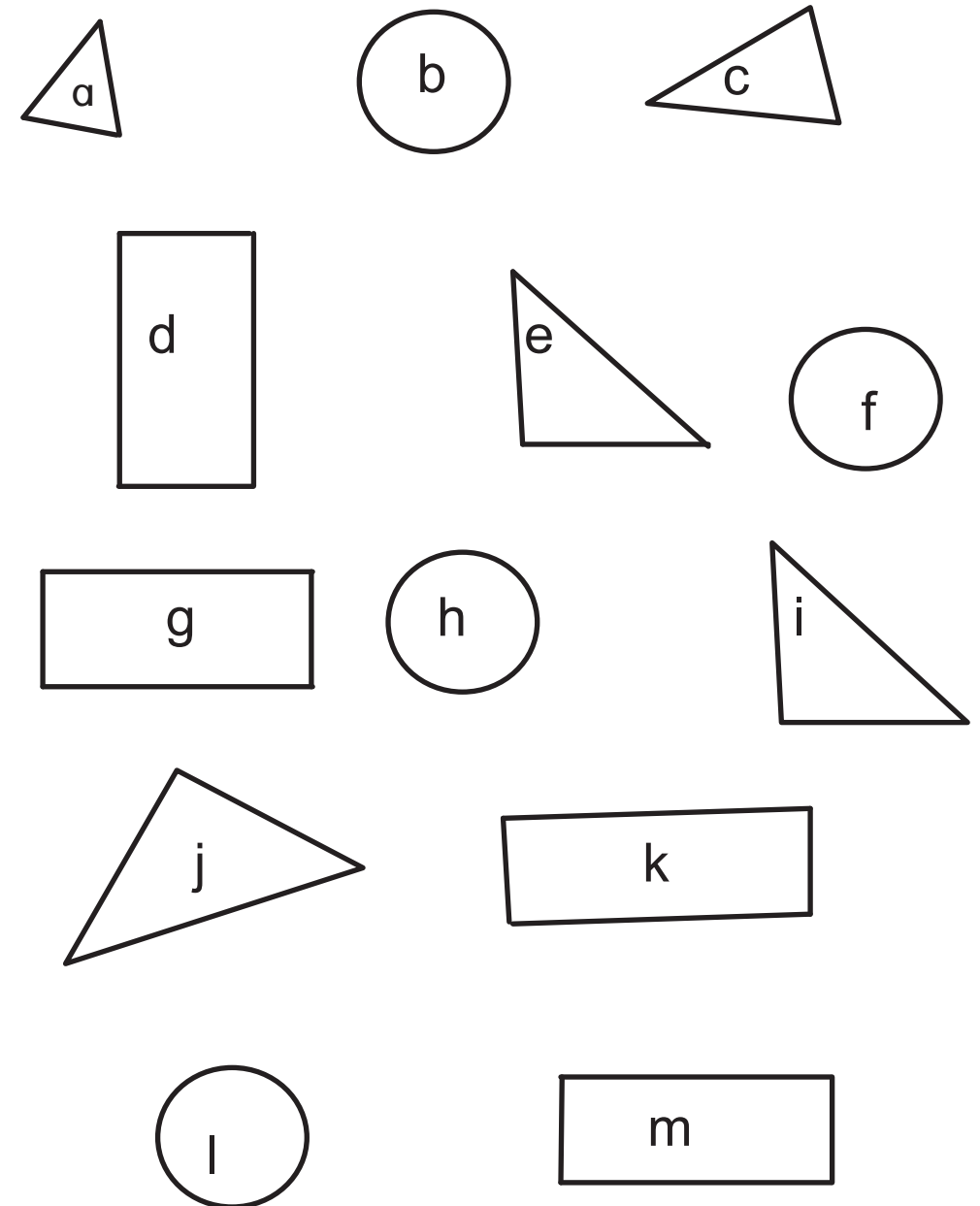
This standard 1 Mathematics pupil's book in Kĩĩtharaka was developed by teachers, education officials from the Tharaka programme area and BTL staff and Consultants. Earlier, before the production of the books in this series, BTL worked with the community whose language was previously unwritten to develop and produce a functionally and acceptable orthography (writing system).

It is my hope that this book will lay a strong foundation to enable Tharaka children to learn numbering and numeracy skills. It is my desire to see that these books will become a stepping stone to the greater success and performance in the children's future learning process. The use of Mother Tongue in teaching and learning in schools has proved to enable learners to easily take their first steps in learning how to read, write and do basic numbering and arithmetic.

I believe that good quality learning is not only aimed at enabling the learners to be competent, productive and successful in their exams; but also at encouraging diversity and developing a generation of citizens who are proud of and well rooted in their cultural and traditional heritage.

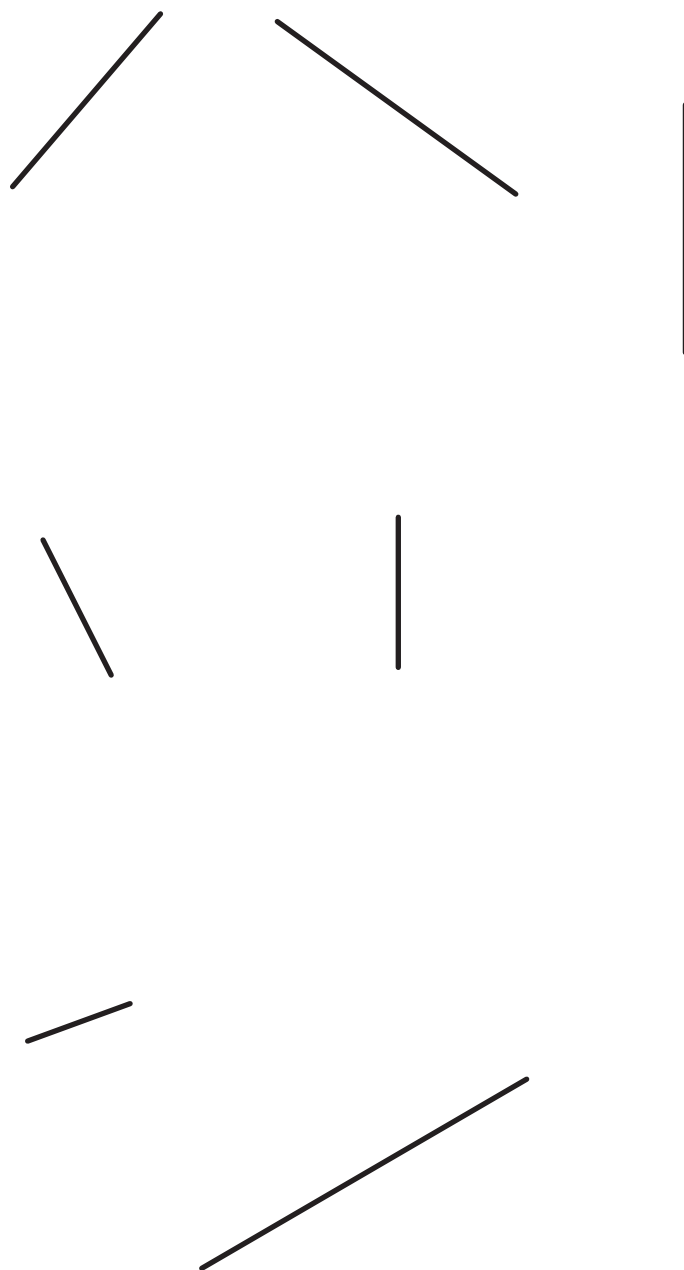
I recognize and applaud the healthy partnerships that BTL has had with the Ministry of Education as represented by the Education Officials and the teachers. On behalf of BTL, I take this opportunity to thank all our partners for having tirelessly and selflessly contributed to the development, editing and production of this student book. I hope this contribution will go along way to improve the quality of life through cultural and socio-economic development.

Rev. Peter Munguti
General Secretary,
Bible Translation and Literacy (BTL)
February 2012



1. N'ithiûrûûrî bigana ûkwona?
2. I mîcooro îgana îrî na koona ithatû?
3. I mîraba îmîraaya îgana ûkwona?

C. Mîcitaarî îrûûngi



MARA MARÎ KU

GÎCUNCÎ KÎA MBERE: Naamba 1

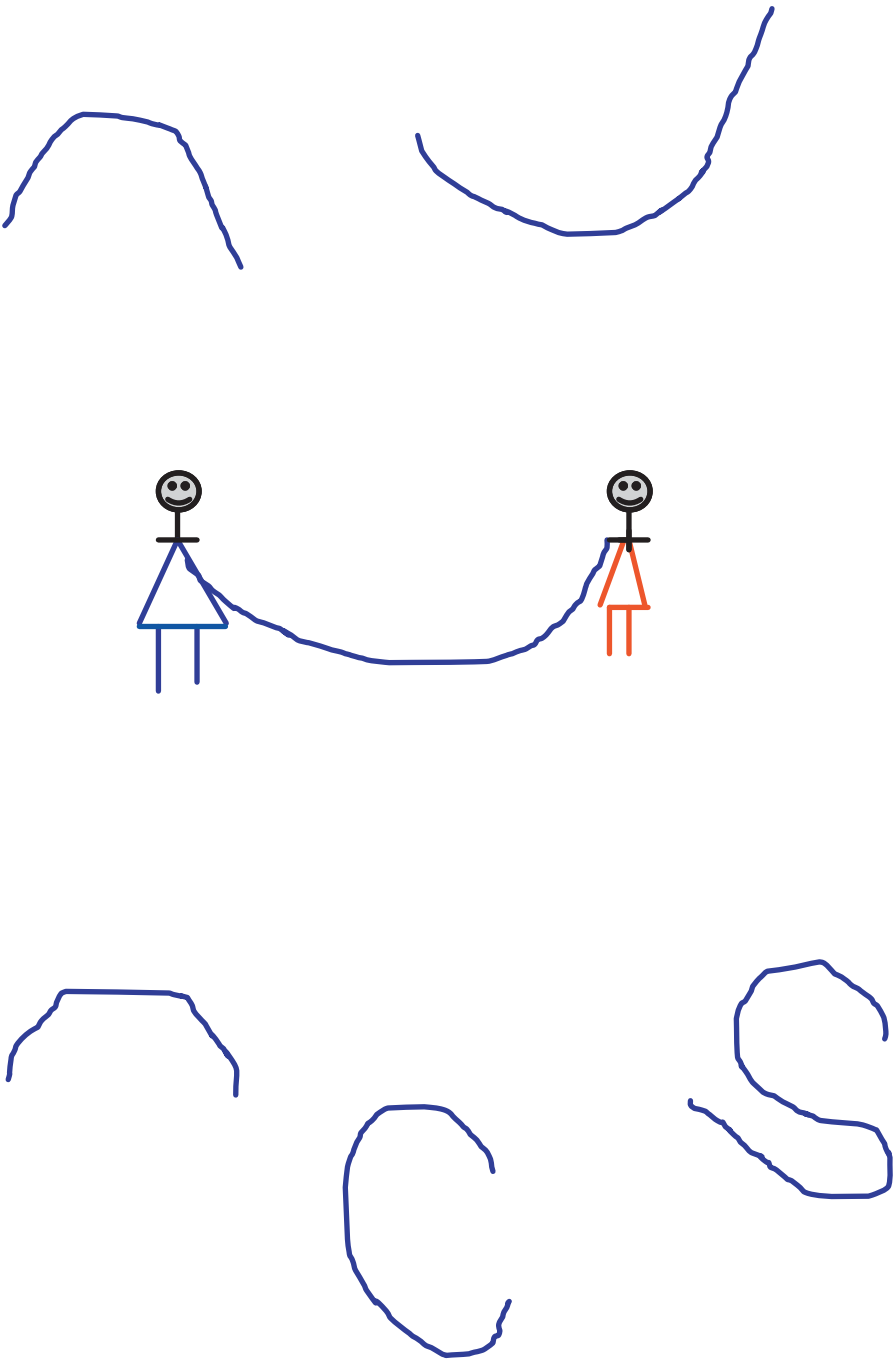
GÎCUNCÎ KÎA BIÎRÎ: Naamba Ciûyûri 7

GÎCUNCÎ KÎA BITHATÛ: Kûriinganîra 14

GÎCUNCÎ KÎA BINA: Kûthima 31

GÎCUNCÎ KÎA BITAANO:
Mathaabu ma Mîcooro 40

B. Micitaarî îkoombi

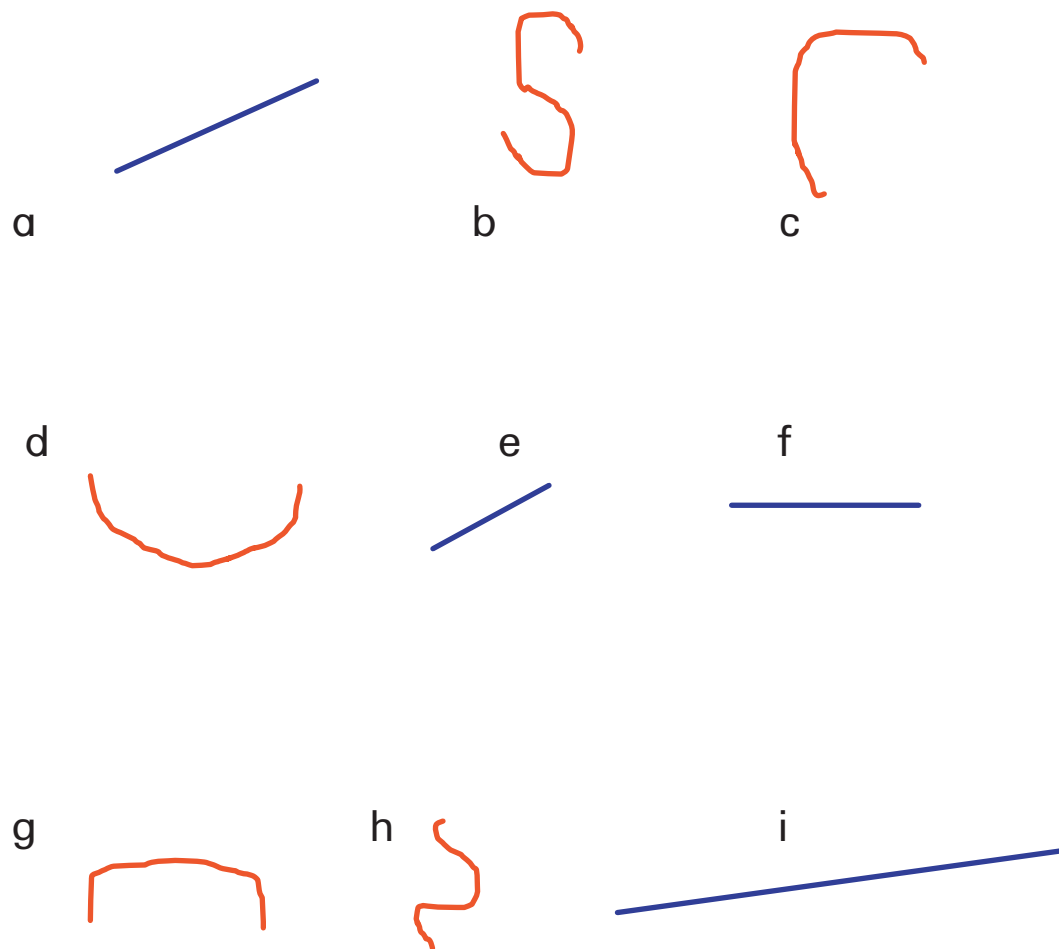


GÎCUNCÎ KÎA BITAANO

KÎONGO GÎA KÎTHOOMO: Mathaabu ma mîcooro

A. Mîcitaarî îrûngi na îkoombi

Raitha bwega wone



1. Gweta mîcitaarî îra îrûûngi
2. Gweta mîcitaarî îra îkoombi

GÎCUNCÎ KÎA MBERE: Naamba

KÎONGO GÎA KÎTHOOMO: Kwîthuuranîra gûtara

A. Gûtaarûkania na kûbaangania

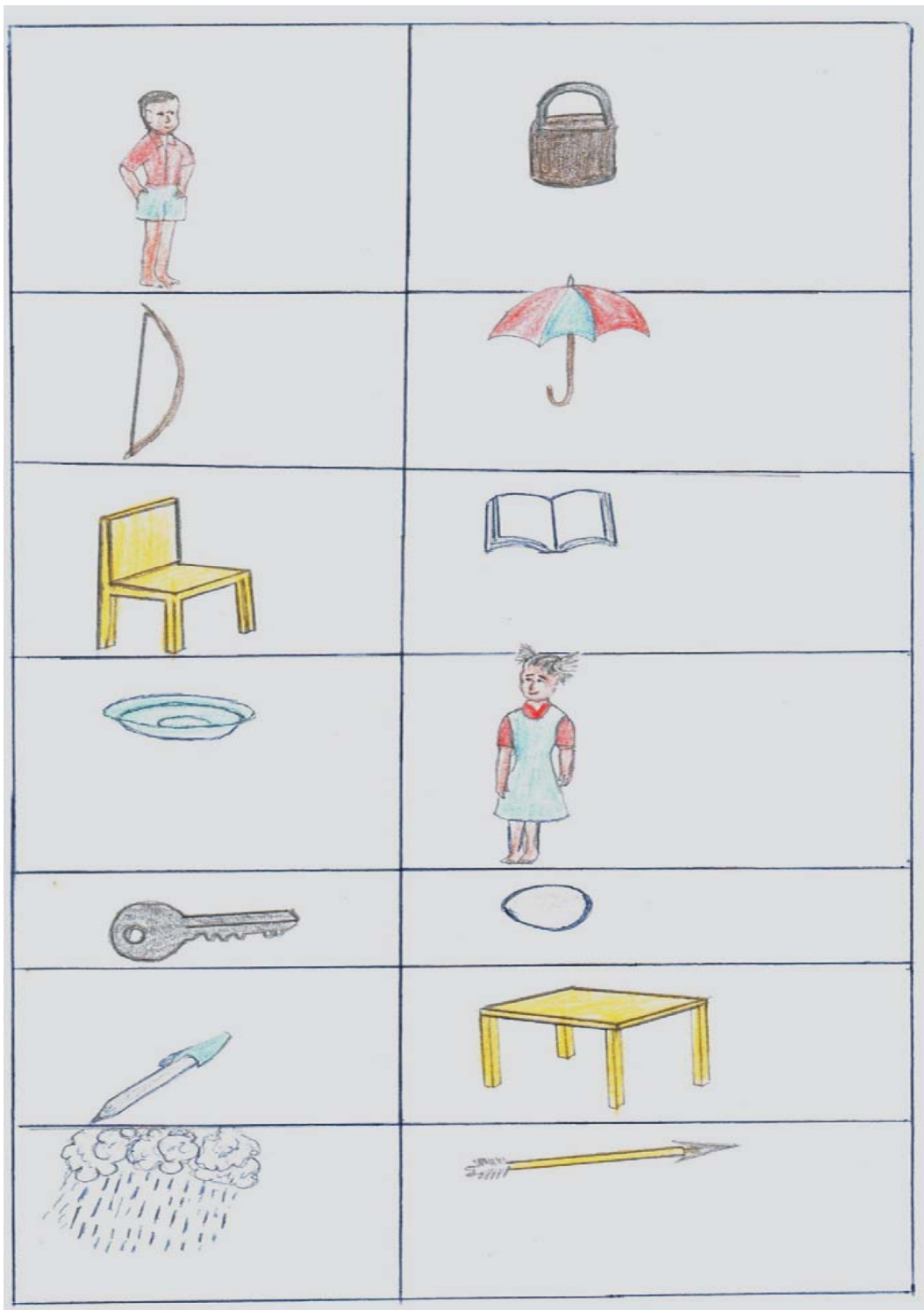


Into bibi ibiîngîreene. Ti bitaarûkanie
bibaanganua bira bibuaneene biaigwa amwe.



nto bibi ibitaarûkanie, bira bibuaneene biagaigwa
bantû amwe.

B. Kûringithania mbica



Arutwa baumiite cukuru



*Mûrutwa
akînyua caai*

G. Ntugû cia kiumia

Kiumia i gîa ntugû mûgwanja.

1. Ya mbere yîitawa ntugû ya ncuma pili.
2. Ya ciiri yîitawa ntugû ya ncuma tatû.
3. Ya inya yîitawa ncuma inne.
4. Ya itaano yîitawa Aramici.
5. Ya ithanthatû yîitawa ncumaa.
6. Ya mûgwanja yîitawa ncumamosi.

Biûria

1. I ntugû irîkû tâcuuragia bendeera cukuru?
2. Thoko ya kwenu n'ya ntugû irîkû?
3. Gweta ntugû îra ûthiyaga kanicaani

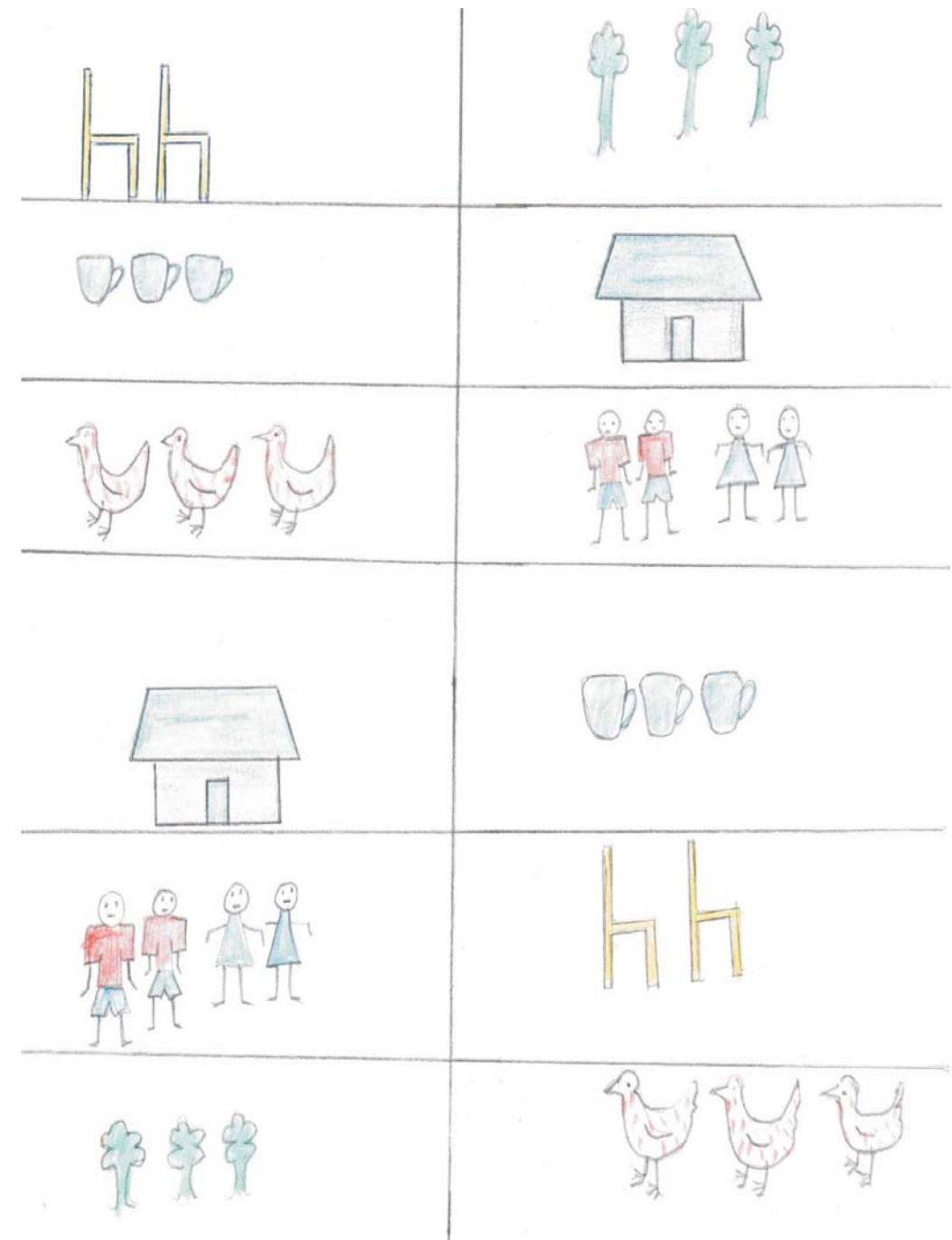


Mûrutwa agîûkîîra gîtandaani rûkîîrî

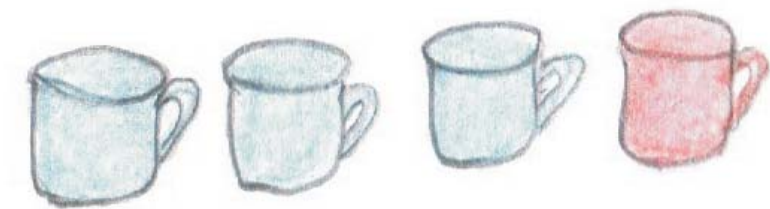


Mûrutwa akîthaamba meetho

C. Kûbuanaania mbica



D. N'ikwingîa na îmwê



Arutwa bagîcanûra ntuundu bathi cukuru



Riûa rîkiuma



Kwanîka nguo



gîcanûri- 10/ = karamu- 6/ = nderemende - 2/ =

I mbia igana cia into bibi ?

- (i) Îkome na nderemende
- (ii) Nderemende na gîcanûri
- (iii) Magati maîrî
- (iv) Îbuku na magaci maîrî
- (v) Mabuku maîrî

F. Mathaa

I thaa igana?

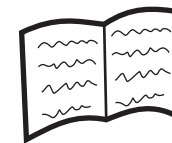
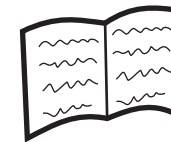
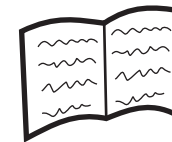
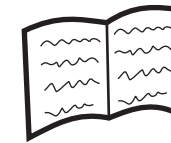
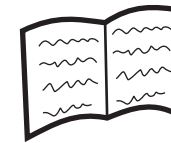
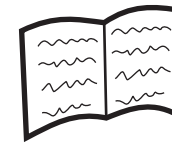
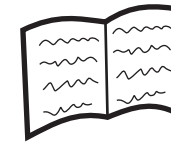
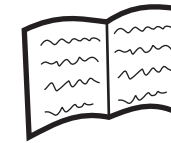
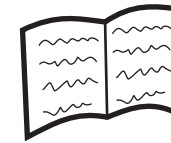
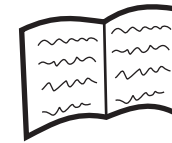
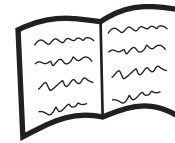
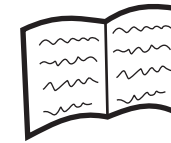
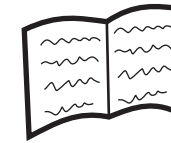
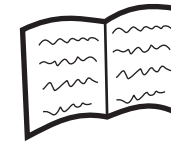
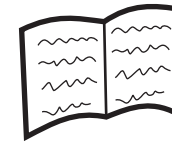


*Mûrutwa amaami
ûtugû*

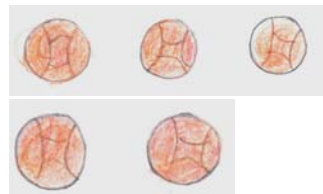
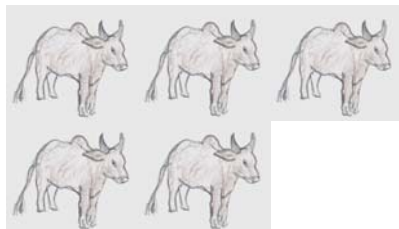
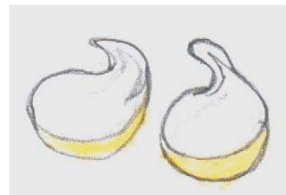
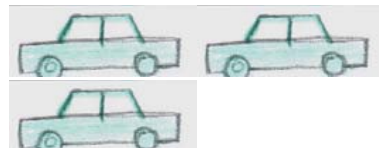
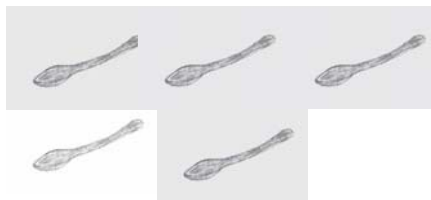


*Arutwa bagîkinya
cukuru*

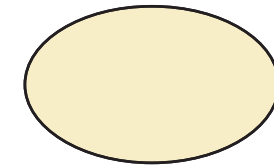
E. N'ikûnyia na îmwê



F. I kûnyîia, i kwingîa, na iganeene



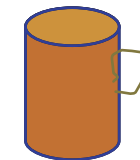
îbuku - 30/ =



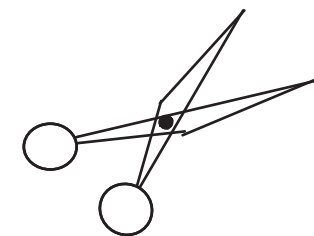
îkome - 5/ =



cûûria - 50/ =

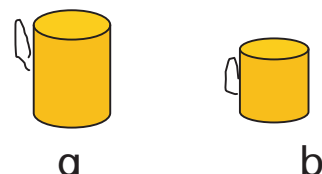


gîkombe - 12/ =

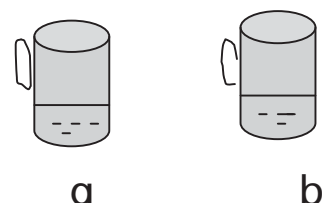


magaci - 40/ =

C. Mûthûûmba



I gikombe kîrîkû
gîkethîrwa kîrî na
rûûyî rwingî?



***Ikombe bibi
birî na rûûyî
rûganeene***

Ûntû bwa kûrûtha

Arutwa batûmîre into mwanja mwanja kûthima:
rûûyî, mûthanga, mûthetu.

D. Mbia cia mûthere

Menja mbia ciaku.



GÎCUNCÎ KÎA BIÎRÎ: Naamba ciûyûri

KÎONGO GÎA KÎTHOOMO: Gûtara

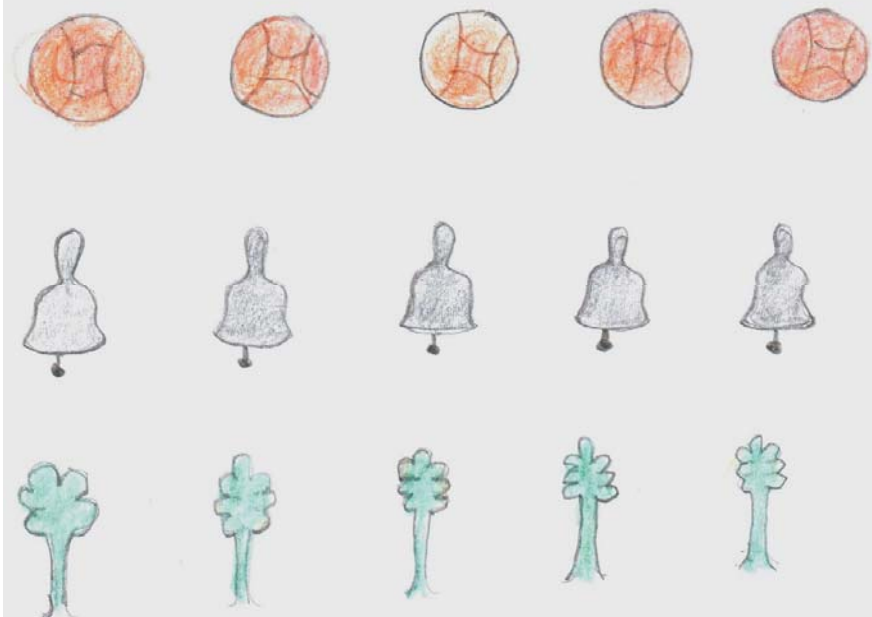
Kwambîîria

Gûtara i njîra ya kûmenya mûgana wa gîntû.
Twambagîîria gûtara kuuma îmwê mwanka îkûmi.

A. Gûtara



tara itaano



B. Gûtara îmwê mwanka mîrongo kenda na kenda. Andîka îmwê mwanka kenda na mîgaambo

Namba	Mîgaambo
1	
2	
3	
4	
5	
6	
7	
8	
9	

B. Ûrito

Into bitiganeenie ûrito.
Kûrî bio birito nkûrûki ya bira biingî.

Raitha into bibi guuge kîra kîrito nkûrûki ya kîra kîingî.



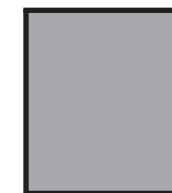
yiiga



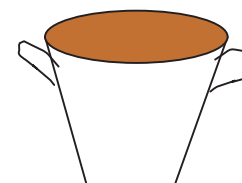
karamu ka mata



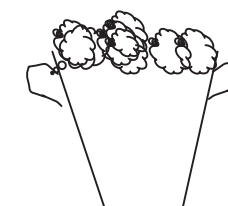
îbuku rîa mwandîko



îbuku rîa mûtambo

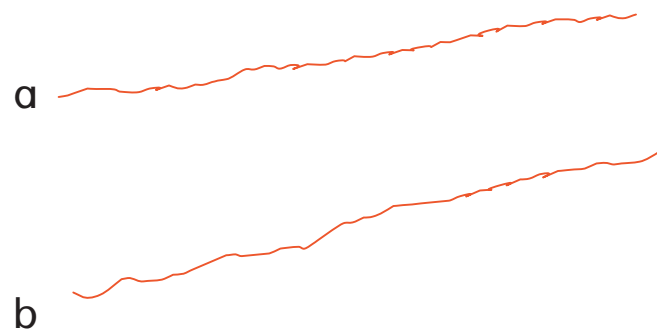


gîkabû kîûyûri
mûthetu



gîkabû kîûyûri
marataati

I gîkabû kîrîkû kîrito nkûrûki ya kîra kîingî?



Kamûtî ka mbere i kaganeene na kamûtî ga twîrî

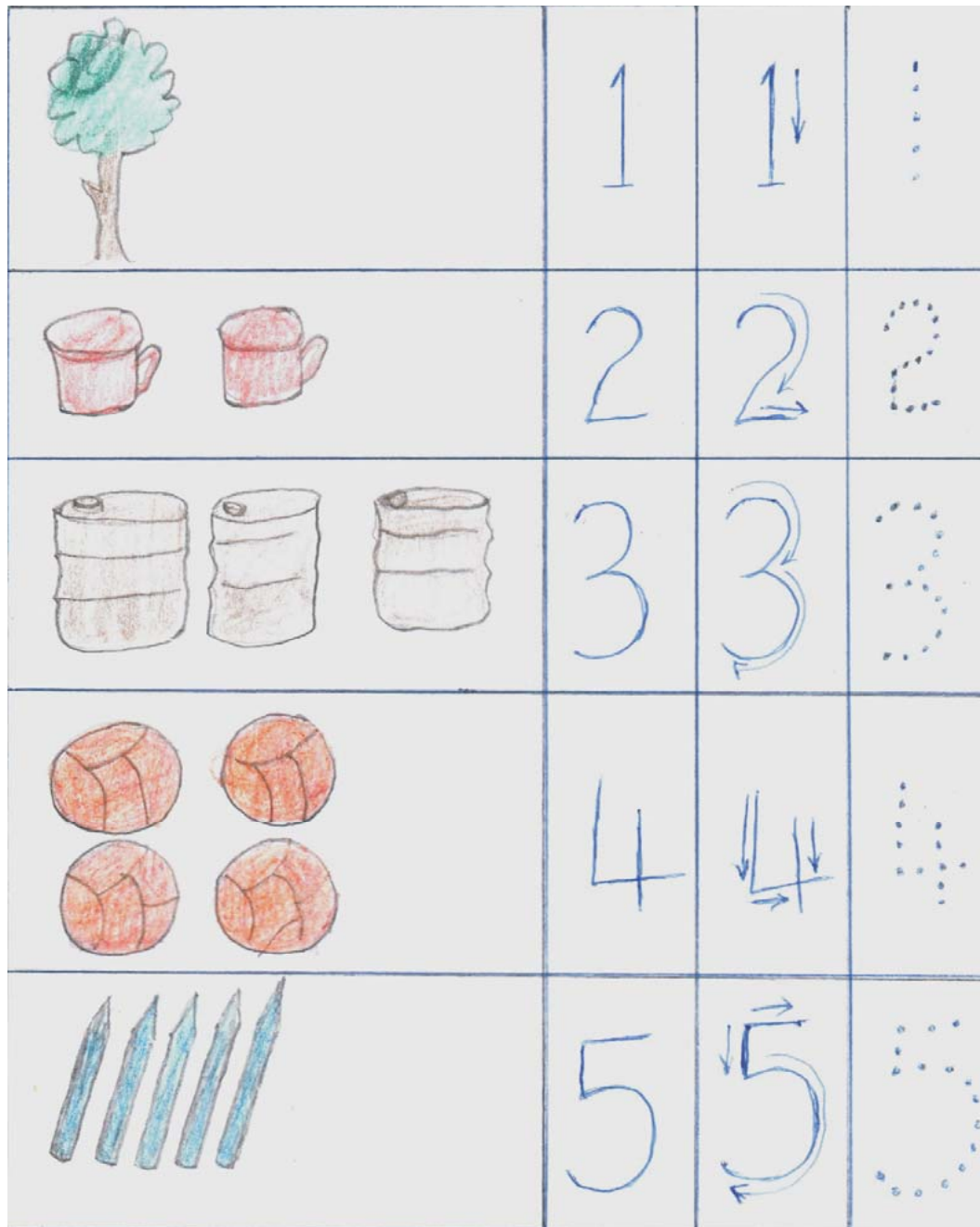
Ûntû bwa kûrûtha

- (a) Arutwa batûmîre njara ciao kûthima îbuku rîa mathaabu.
- (b) Bathime ûraaya bwa ndeciki ciao bagîtûmagîra biara.
Bathime waariî kana ûraaya bwa kîraci bagîtûmagîra magûrû.
- (c) Bacooke bathime bagîtambagia magûrû.
- (d) Bathime bagîtûmagîra rûrigi.
- (e) Bathime bagîtûmagîra kamûtî.

C. Thooma, bangania na gwandîke îmwwe mwanka mîroongo keenda na keenda

1	2	3	4	6	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	32			
33	34	35	36	37	38	39	40	41	42		
43	44	45	46	47	48	49	50	51	52	53	
54	55	56	57	58	59	60	61	62	63		
64	65	66	67	68	69	70	71	72			
73	74	75	76	77	78	79	80	81	82		
83	84	85	86	87	88	89	90	91			
92	93	94	95	96	97	98	99				

D. Thooma na gwandîke



GÎCUNCÎ KÎA BINA: Kûthima

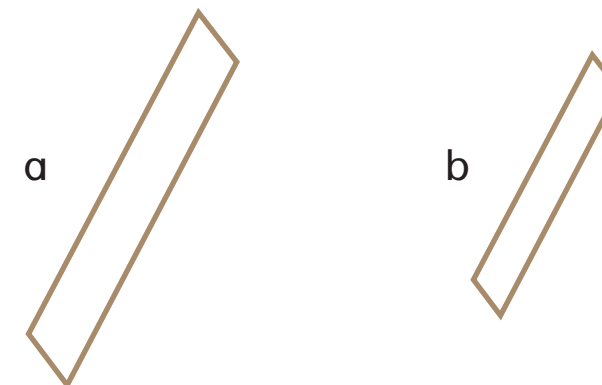
KÎONGO GIA KÎTHOOMO: Kûganaania ûraaya

A. Ûraaya



(i) I kamûtî karîkû karaaya?

(ii) I kamûtî karîkû gakubî?



(i) I kabaaû karîkû karaaya?

(ii) I kabaaû karîkû gakubî?

$$9 - 5 =$$

$$9 - 5 =$$

$$29 - 5 =$$

$$39 - 5 =$$

$$49 - 5 =$$

$$8 - 7 =$$

$$18 - 7 =$$

$$28 - 7 =$$

$$38 - 7 =$$

$$48 - 7 =$$

E. Ara namba îrî

Rîra tûgûtara kûrî na namba ira irûgamagîra na ira ciingi matigari. Rîra namba irî ciîrî irî amwe ta 13, 27, 51, namba îra îrî rûteere rwa ûrîo irûgamagîra **matigari**. Îra îrî rûteere rwa ûmotho n'yo irûgamagîra **makûmi**.

Ngerekano

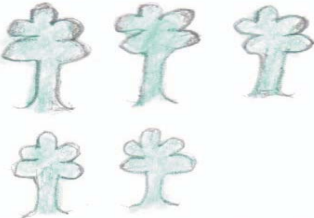
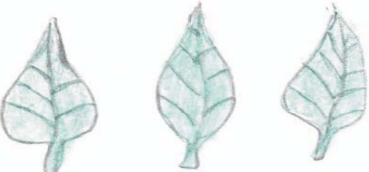
13 - Ithatû irûgamîrîte **matigari**.

- Îmwe irûgamîrîte **makûmi**.

Ngûgî ya kûruta

Onania matigari na makûmi nambaani ino:
11, 16, 25, 90, 99

Tara na gwandîke namba

	=
	=
	=
	=
	=

Coora mataane ma mathaabu mama.

2 5 - 2 = 2 3 2 2 - 1 = 2 1

3 5 - 2 = 3 3 3 2 - 1 = 3 1

4 5 - 2 = 4 3 4 2 - 1 = 4 1

Biûria

2 - 2 = 5 - 3 =

1 2 - 2 = 1 5 - 3 =

2 2 - 2 = 2 5 - 3 =

3 2 - 2 = 3 5 - 3 =

4 2 - 2 = 4 5 - 3 =

$1 + 1 =$	$4 + 4 =$	$6 + 3 =$
$11 + 1 =$	$14 + 4 =$	$16 + 3 =$
$21 + 1 =$	$24 + 4 =$	$26 + 3 =$
$31 + 1 =$	$34 + 4 =$	$36 + 3 =$
$41 + 1 =$	$44 + 4 =$	$46 + 3 =$

Mataane ma namba cia kûruta.

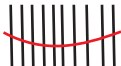
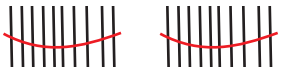
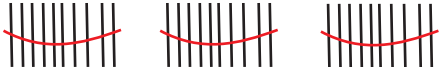
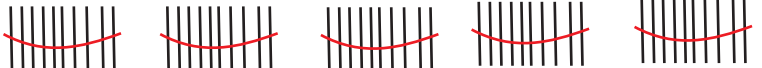
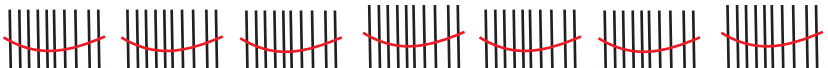
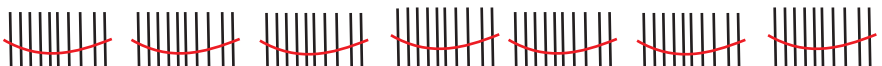
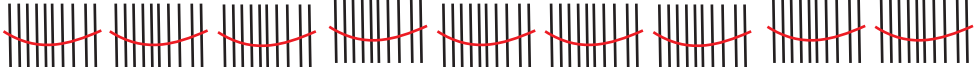
1.  $5 - 2 = 3$  

2.  $15 - 2 = 13$  

3.  $12 - 1 = 11$  

Gûtara na kûbangania makûmi kuuma îkûmi mwanka mîrongo kenda

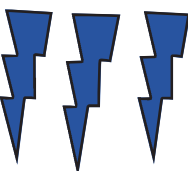
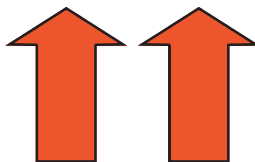
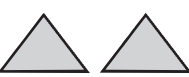
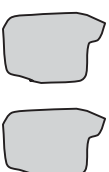
A. Kûreeta ira ngemie na ira itarî ngemie amwe na kûriinganîra

		= 10
		= 20
		= 30
		= 40
		= 50
		= 60
		= 70
		= 80
		= 90

GÎCUNCÎ KÎA BITHATÛ

KÎONGO GÎA KÎTHOOMO: Kûringanîra

A. Kûreeta ira ngemie na ira itarî ngemie
amwe na kûringanîra

Mataane ma naamba cia kûringanîra na kûruta



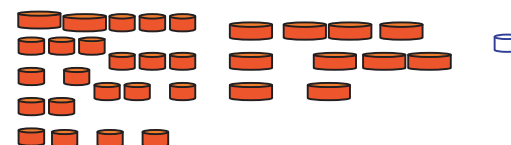
$$2 + 1 = 3$$



$$12 + 1 = 13$$



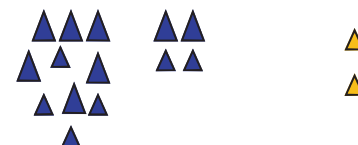
$$22 + 1 =$$



$$32 + 1 =$$



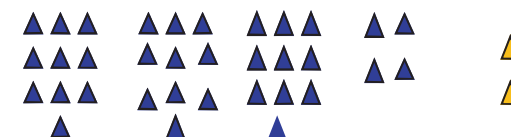
$$4 + 2 =$$



$$14 + 2 =$$



$$24 + 2 =$$



$$34 + 2 =$$

$2 + 1 =$	$3 - 2 =$	$6 + 3 =$	$9 - 6 =$
$1 + 2 =$	$3 - 1 =$	$3 + 6 =$	$9 - 3 =$

$1 + 3 =$	$4 - 1 =$	$7 + 1 =$	$8 - 1 =$
$3 + 1 =$	$4 - 3 =$	$7 + 2 =$	$8 - 7 =$

$3 + 2 =$	$5 - 3 =$	$4 + 3 =$	$7 - 4 =$
$2 + 3 =$	$5 - 2 =$	$3 + 4 =$	

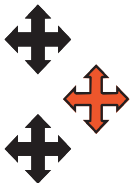
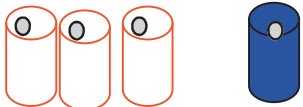
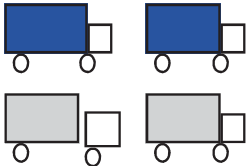
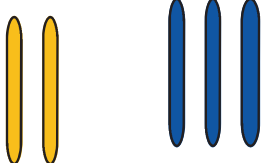
$\begin{array}{r} 2 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ - 2 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ - 5 \\ \hline \end{array}$
---	---	---	---

$\begin{array}{r} 3 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ - 3 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ - 5 \\ \hline \end{array}$
---	---	---	---

$\begin{array}{r} 1 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 1 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ - 1 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ - 8 \\ \hline \end{array}$
---	---	---	---

$\begin{array}{r} 3 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ - 4 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ - 3 \\ \hline \end{array}$
---	---	---	---

B. Kûreeta amwe na kûriinganîra

 $2 + 1 = \square$	 $\begin{array}{r} 3 \\ + 1 \\ \hline \end{array}$
 $1 + 1 = \square$	 $\begin{array}{r} + 1 \\ \hline \end{array}$
 $1 + 1 = \square$	 $\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$
 $2 + 2 = \square$	 $\begin{array}{r} 2 \\ + 3 \\ \hline \end{array}$
 $2 + 3 = \boxed{2}$	 $\begin{array}{r} 1 \\ + 3 \\ \hline \end{array}$

C. Kûringanîra mathaabu makeranîtie na marûûngi

Ringanîra ikeranîtie

$2 + 1 =$	$1 + 3 =$
$1 + 2 =$	$3 + 2 =$
$1 + 1 =$	$2 + 3 =$
$2 + 2 =$	$4 + 1 =$
$1 + 1 =$	$1 + 4 =$

Ringanîra cîndamîite

$\begin{array}{r} 3 \\ + 1 \\ \hline \hline \end{array}$	$\begin{array}{r} 2 \\ + 1 \\ \hline \hline \end{array}$	$\begin{array}{r} 4 \\ + 1 \\ \hline \hline \end{array}$	$\begin{array}{r} 1 \\ + 4 \\ \hline \hline \end{array}$
--	--	--	--

$90 - 10 =$	$20 - 10 =$
$30 - 10 =$	$60 - 50 =$
$70 - 20 =$	$40 - 10 =$

$\begin{array}{r} 30 \\ - 10 \\ \hline \hline \end{array}$	$\begin{array}{r} 80 \\ - 30 \\ \hline \hline \end{array}$	$\begin{array}{r} 70 \\ - 30 \\ \hline \hline \end{array}$	$\begin{array}{r} 30 \\ - 30 \\ \hline \hline \end{array}$	$\begin{array}{r} 80 \\ - 70 \\ \hline \hline \end{array}$
$\begin{array}{r} 60 \\ - 40 \\ \hline \hline \end{array}$	$\begin{array}{r} 70 \\ - 50 \\ \hline \hline \end{array}$	$\begin{array}{r} 90 \\ - 80 \\ \hline \hline \end{array}$	$\begin{array}{r} 70 \\ - 40 \\ \hline \hline \end{array}$	$\begin{array}{r} 90 \\ - 20 \\ \hline \hline \end{array}$

L. Ngwatanîro ya kûringanîra na kûruta.

Wa rîra îthaabu rîa kûringanîra rîrî na mathaabu maîrî ma kûruta.

Ngerekano

$5 + 3 = 8$

$8 - 3 = 5$

$\begin{array}{r} 24 \\ - 1 \\ \hline \end{array}$	$\begin{array}{r} 48 \\ - 6 \\ \hline \end{array}$	$\begin{array}{r} 34 \\ - 2 \\ \hline \end{array}$	$\begin{array}{r} 36 \\ - 4 \\ \hline \end{array}$	$\begin{array}{r} 44 \\ - 1 \\ \hline \end{array}$
$\begin{array}{r} 52 \\ - 1 \\ \hline \end{array}$	$\begin{array}{r} 61 \\ - 0 \\ \hline \end{array}$	$\begin{array}{r} 72 \\ - 1 \\ \hline \end{array}$	$\begin{array}{r} 79 \\ - 7 \\ \hline \end{array}$	$\begin{array}{r} 95 \\ - 2 \\ \hline \end{array}$

$27 - 2 =$	$78 - 3 =$	$47 - 6 =$	$87 - 2 =$
$34 - 3 =$	$99 - 7 =$	$66 - 4 =$	$84 - 4 =$
$58 - 3 =$	$69 - 1 =$		

K. Kûrutithania mîthûmba ya îkûmi

Ngerekano



$$\begin{array}{r} 80 \\ - 30 \\ \hline 50 \end{array}$$

Rutithania:

$30 - 20 =$	$80 - 60 =$
$50 - 30 =$	$80 - 10 =$

$\begin{array}{r} 1 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ + 1 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ + 1 \\ \hline \end{array}$
$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ + 3 \\ \hline \end{array}$	

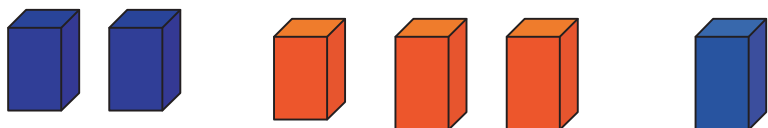
D. Koobia na ûthimithanie namba ira ibuaneene irî ngarûranie

$1 + 3 =$	$2 + 2 =$
$4 + 1 =$	$1 + 2 =$
$2 + 2 =$	$3 + 1 =$
$1 + 1 =$	$3 + 2 =$
$2 + 1 =$	$1 + 4 =$
$2 + 3 =$	$1 + 1 =$

E. Kûringanîra namba ithatû irî îmwê îmwê

Nwa tûringanîre namba inu ikeranîîtie kana cîîndami

Riinganîra ikeranîîtie



$$2 + 3 + 1 = 6$$

$$2 + 2 + 2 = \quad \quad \quad 1 + 2 + 3 = \quad \quad \quad 3 + 3 + 3 =$$

$$4 + 4 + 1 = \quad \quad \quad 3 + 2 + 1 = \quad \quad \quad 3 + 4 + 1 =$$

$$6 + 0 + 3 = \quad \quad \quad 5 + 0 + 4 = \quad \quad \quad 7 + 1 + 1 =$$

$$4 + 3 + 0 = \quad \quad \quad 6 + 2 + 1 = \quad \quad \quad 3 + 4 + 1 =$$

Ringanîra cîîndamîîte

6	2	2	2
2	4	2	5
+ 0	+ 3	+ 3	+ 2
_____	_____	_____	_____
_____	_____	_____	_____

1 4	1 6	1 5	1 8	1 0
- 9	- 7	- 9	- 9	- 2
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Ngerekano

$$\begin{array}{r} 15 \\ - 8 \\ \hline 7 \end{array}$$

$$14 - 9 = 5$$

1 3	1 5	1 5	1 5	1 4
- 3	- 6	- 7	- 8	- 6
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

J. Kûrutithania namba îmwê kuuma kîrî namba cîîrî ûtakûroomba.

Ngerekano

$$16 - 5 = 11$$

I mbi îgûtigara?



$$5 - 2 = 3$$

Rutithania

$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ -1 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ -3 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ -4 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ -2 \\ \hline \end{array}$$

$$5 - 1 = \quad 4 - 1 = \quad 3 - 1 = \quad 2 - 1 =$$

I. Kûrutania namba îmwê kuuma kîrî namba cîrî mûrutithanîrîe wa namba cia mbere.

Rutithania

$$12 - 3 = \quad 13 - 5 = \quad 12 - 5 = \quad 16 - 7 =$$

$$16 - 8 = \quad 16 - 9 = \quad 12 - 6 = \quad 14 - 5 =$$

$$\begin{array}{r} 5 \\ 2 \\ + 3 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ 0 \\ + 1 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ 1 \\ + 1 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ 3 \\ + 2 \\ \hline \end{array}$$

F. Kûringanîra namba cîrî îcookio rîtagûkûrûka mîrongo keenda na keenda ûtagûkamata

Ringanîra namba cîrî na namba îmwê ûtagûkamata.

Ngerekano

$$\begin{array}{r} 20 \\ + 4 \\ \hline 24 \end{array} \quad \begin{array}{r} 7 \\ + 80 \\ \hline 87 \end{array}$$

$$\begin{array}{r} 10 \\ + 7 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ + 40 \\ \hline \end{array} \quad \begin{array}{r} 50 \\ + 6 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ + 62 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 70 \\ + 8 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ + 80 \\ \hline \end{array} \quad \begin{array}{r} 40 \\ + 3 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ + 6 \\ \hline \end{array}$$

Ringanîra namba cîrî cîrî ûtagûkamata

Ngerekano

$$\begin{array}{r} 50 \\ + 27 \\ \hline 77 \end{array} \quad \begin{array}{r} 42 \\ + 10 \\ \hline 52 \end{array}$$

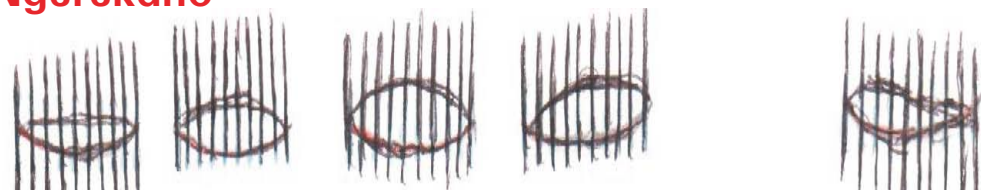
$$\begin{array}{r}
 12 \\
 + 15 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 12 \\
 + 31 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 13 \\
 + 23 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 32 \\
 + 23 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 43 \\
 + 34 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 45 \\
 + 54 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 66 \\
 + 24 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 44 \\
 + 55 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 60 \\
 + 27 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 47 \\
 + 50 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 35 \\
 + 30 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 42 \\
 + 11 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 52 \\
 + 10 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 35 \\
 + 40 \\
 \hline
 \end{array}$$

G. Kûringanîra mîthûûmba ya îkûmi îtagûkûrûka mîrongo keenda

Ngerekano



$$40 - 10 = 50$$

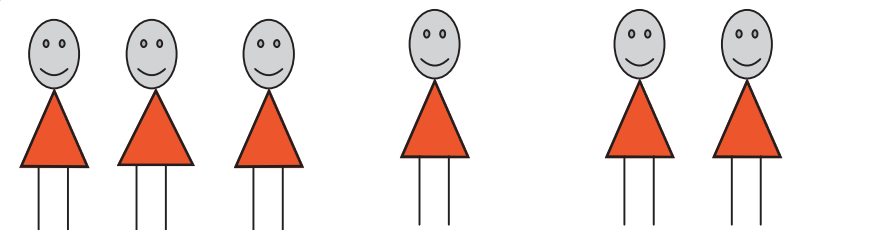
$$\begin{array}{rcl}
 20 + 50 & = & 20 \\
 20 + 40 & = & + 10 \\
 70 + 20 & = & \hline
 \end{array}
 \quad
 \begin{array}{rcl}
 40 & & 50 \\
 + 30 & & + 20 \\
 \hline & & \hline
 \end{array}$$

$$\begin{array}{rcl}
 30 + 20 & = & 50 \\
 10 + 70 & = & + 40 \\
 & & \hline
 \end{array}
 \quad
 \begin{array}{rcl}
 50 & & 50 \\
 + 40 & & + 30 \\
 \hline & & \hline
 \end{array}$$

H. Kûrutithania na kwaiga mwanya

I mbi îgûtigara?

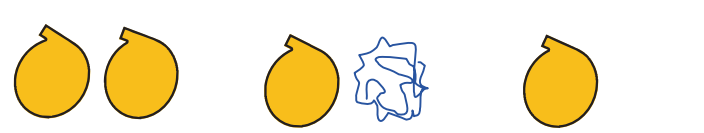
Ngerekano



$$3 - 1 = 2$$



$$4 - 2 = \boxed{}$$



$$2 - 1 = 1$$

Rutithania

$$5 - 3 = \quad 5 - 4 = \quad 3 - 1 = \quad 4 - 2 =$$

$$2 - 1 = \quad 4 - 1 = \quad 3 - 2 = \quad 5 - 2 =$$

$$5 - 1 = \quad 4 - 3 =$$