

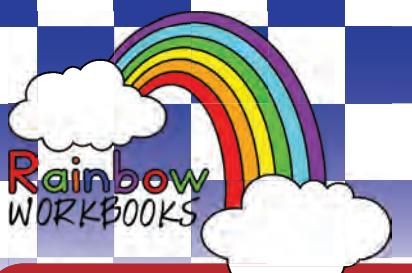


Vho Angie Mutshekga,  
Minister of Basic Education



Vho Enver Surty.  
Minister of Basic Education

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MATHEMATICS IN TSHIVENDA  
GRADE 1 – BOOK 2  
TERMS 3 & 4

ISBN 978-1-4315-0134-2

THIS BOOK MAY  
NOT BE SOLD.

Bugu idzi dzo iñwalelwa vhana vha Afrika Tshipembe, mushumo wa hone wo rangiwa phanda nga Minista wa Pfunzo ya Muteo. Vho Angie Motshekga na Muthusaminista wa Pfunzo ya Muteo. Vho Enver Surty.

Bugu dza mishumo dza Rainbow ndi tshipida tsha zwe Muhasho wa Pfunzo ya Muteo wa ita zwa u khwiisa vhukoni ha vhagudi vha Afrika Tshipembe vha gireidi dza rathi dza u ranga. Sa tshiinwe tsha zwithu zwihiwlwane zwa Pulanetshumisi (Action Plan) ya Muvhuso. thandela iyi yo konadzea nge ya lambedzwa lu sa vhudziswi nga Muhasho wa Gwama ja Lushaka (Thirezhari).

Hezwi zwo ita uri Muhasho u kone u bveledza bugu idzi. dzi kha nyambo dzothe dza tshiofisi. dzi tshi waniwa mahala.

Ri na fulufhelo ja uri bugu idzi dzi do thusa vhadededzi (vhagudisi) mushumoni wavho wa u funza wa duvha liñwe na liñwe khathihi na u vha na vhuñanzi uri vha khunyaledze kharikhuluñamu yothe. Ro ita nga vhuronwane uri ri sumbedze ngila vhadededzi kha mishumoitwa (nyito) nge ra shumisa aikhoni dzi no sumbedza uri mugudi u tea u ita zwifhio.

Ri na fulufhelo li no bva li mbiluni uri vhana vha do diphina nga u shumisa bugu idzi zwenezwi vha tshi khou aluwa na u guda. khathihi na uri na vhonewho. sa mudededzi. vha do diphina na vhana avha.

Ri ri kha vhone na vhagudi vhavho. ngavhe zwi tshi vha nakela musi vha tshi shumisa bugu idzi. Zwi pfumbe.

1 2 3 4

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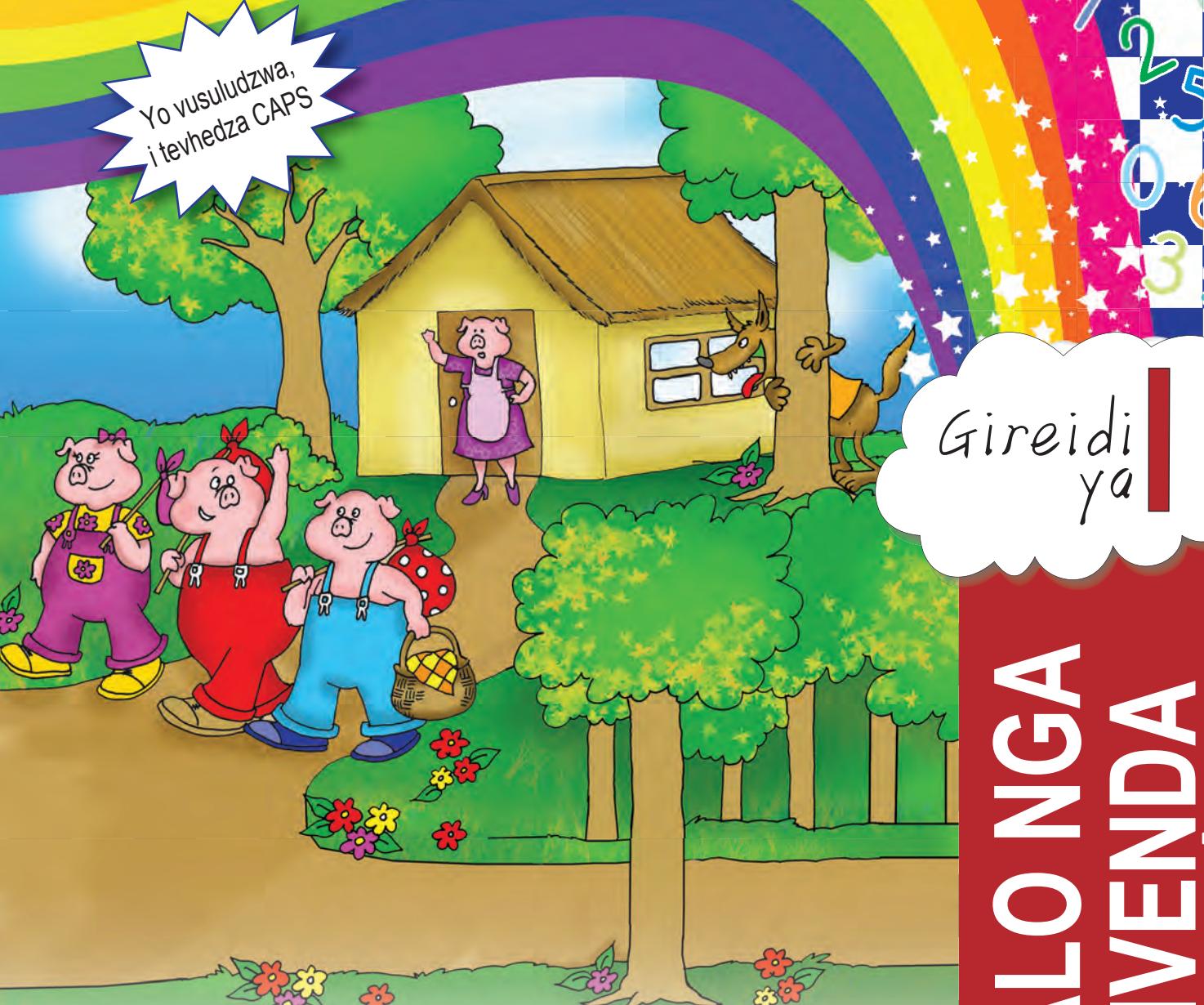
MBALO NGA TSHIVENDA – Gireidi ya | Bugu ya 2

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Basic Education  
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Bugu ya 2  
Themo dza  
3 & 4

# MBALONGA TSHIVENDA

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4 5 0 2 5 1 4 5 10 4 5 0 1 4 2 4 9 5 8 6

# Gireidi ya



## NGA TSHIVENDA

Bugu iyi ndi ya:



Bugu ya

2

TSHIVENDA

65



Deithi:

Themo ya 3

## Pfesesani nomboro II

Mvusuludzo:

Itani ndowendowe ya u ñwala nomboro.



thihi

1 1



mbili

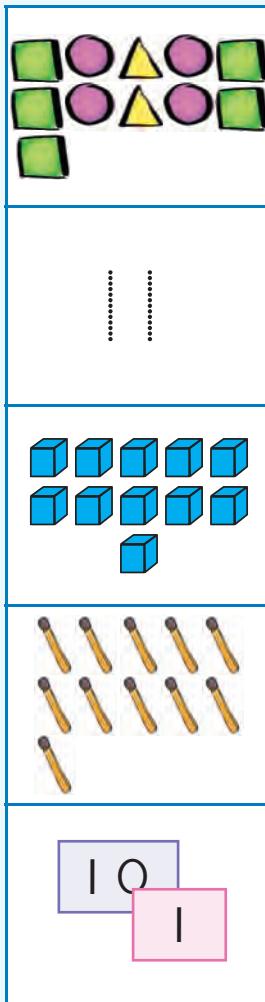
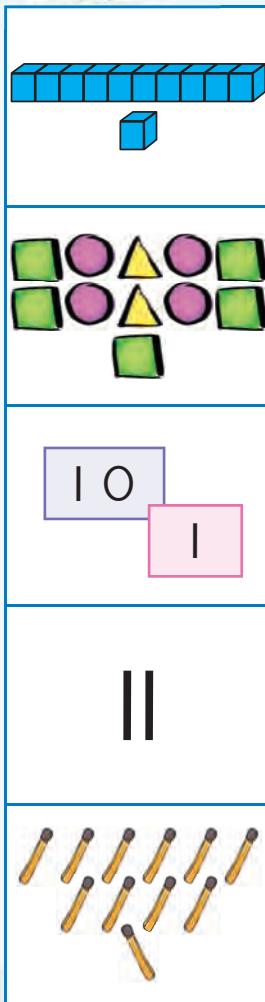
2 2



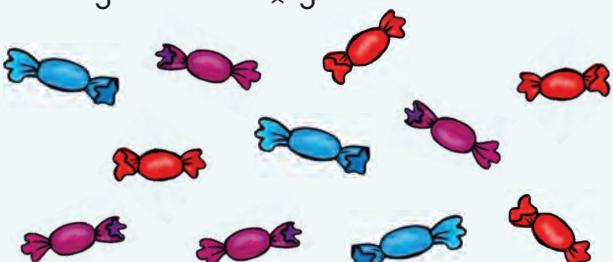
Livhanyani zwifanyiso.



Tangedzelani zwithu.

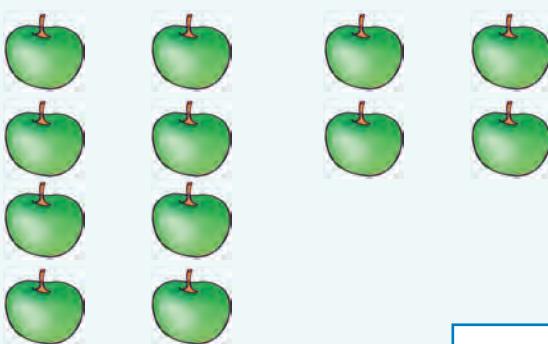


Tangedzelani malegere a 10 fhedzi.



Ho sala malegere mangana?

Tangedzelani maapula a 10 fhedzi.



Ho sala maapula mangana?



2

0

1

2

3

4

5

6

7

8

9

10



Tovhedzelani nomboro.

fumithihi			



Kholomo iñwe na  
iñwe i tea u vha na  
thanganyelo ya ll.  
Ñwalani nomboro dzi  
no khou t̄ahela.

3	5	4
4	5	
4		2



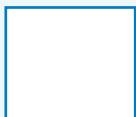
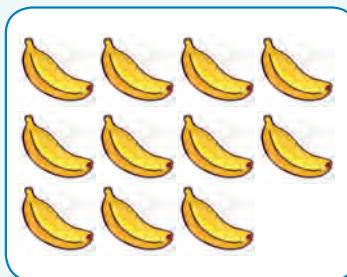
Olani zwithu zwa ll.



Ñwalani nomboro dzi no  
khou t̄ahela.



Vhalani  
zwithu.



Fhedzisani thebulu. Rou (muduba)  
iñwe na iñwe i na tshifanyiso, nomboro  
na ipfi lo imelaho nomboro iyo.

 		fumithihi
		fumithihi
	fumithihi	 



Ndi nomboro ifhio i re t̄hukhu  
kha ll nga thihi?

Ndi nomboro ifhio i re  
khulwane kha ll nga thihi?



Teacher:  
Sign:

Date:



66



Deithi:

Themo ya 3

## Pfesesani nomboro 12

Mvusuludzo:

Itani ndowendowe ya u ñwala nomboro.



raru

3 3



iñā

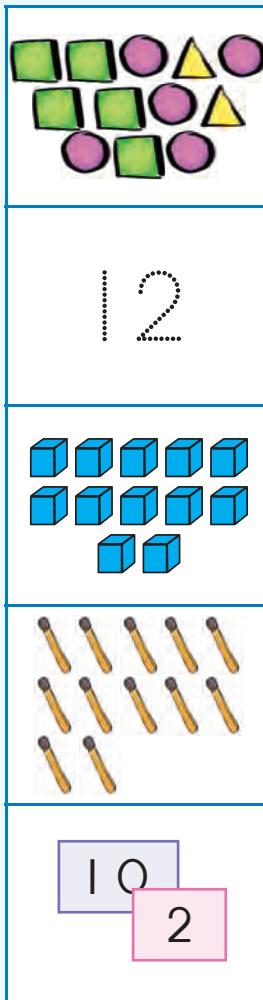
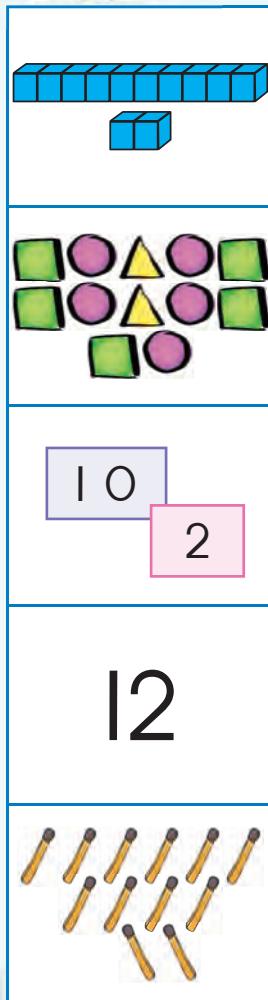
4 4



Livhanyani zwifanyiso.



Tangedzelani zwithu.

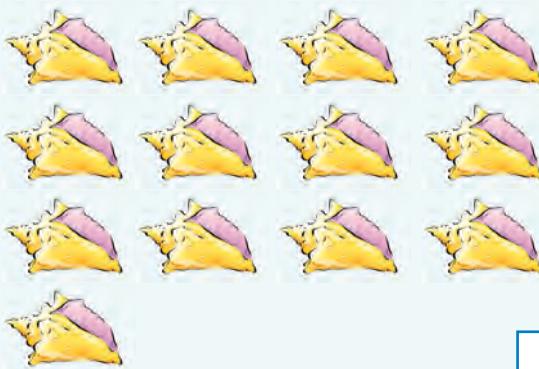


Tangedzelani zwienda zwa 10 fhedzi.



Ho sala zwienda zwingana?

Tangedzelani khambalwanzhe dza 12 fhedzi.



Ho sala khambalwanzhe nngana?



4

0

1

2

3

4

5

6

7

8

9

10



Tovhedzelani nomboro.

12	12	12	12
fumimbili			
12	12	12	12



Kholomo iñwe na  
iñwe i tea u vha na  
thanganyelo ya 12.  
Nwalani nomboro dzi  
no khou t̄ahela.

	7	6
4		4
3	2	
12	12	12



Olani zwithu zwa 12.



Nwalani nomboro dzi no  
khou t̄ahela.

3		5			
8			11		



Vhalani  
zwithu.



Fhedzisani thebulu. Rou iñwe na  
iñwe i na tshifanyiso, nomboro na ipfi lo  
imelaho nomboro iyo.

 		fumimbili
	12	fumimbili
	 	12
	fumimbili	 



Ndi nomboro ifhio i re t̄hukhu  
kha 12 nga thihi?

Ndi nomboro ifhio i re  
khulwane kha 12 nga thihi?





## Pfesesani nomboro 13

Mvusuludzo:

Itani ndowendowe ya u ñwala nomboro.



thanu

5 5



rathi

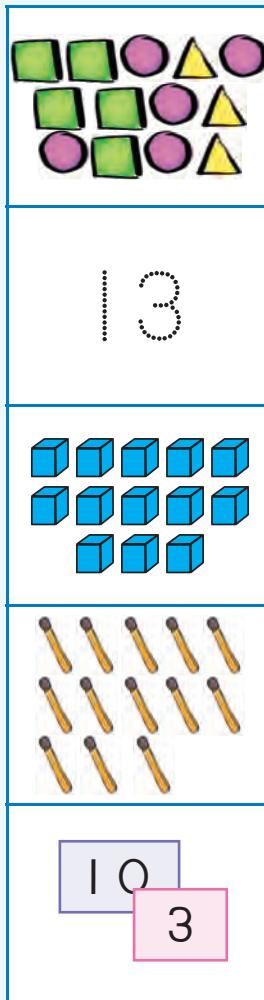
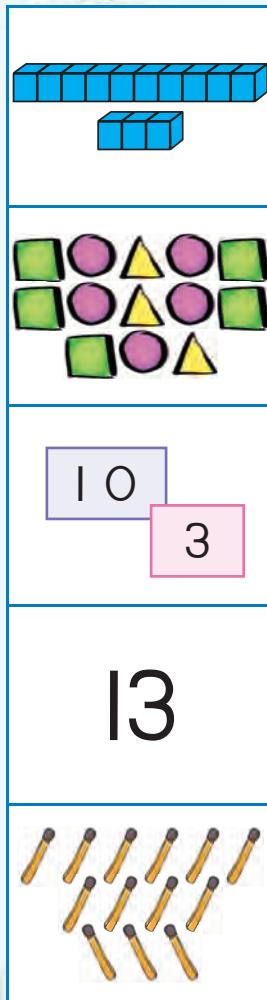
6 6



Livhanyani zwifanyiso.



Tangedzelani zwithu.

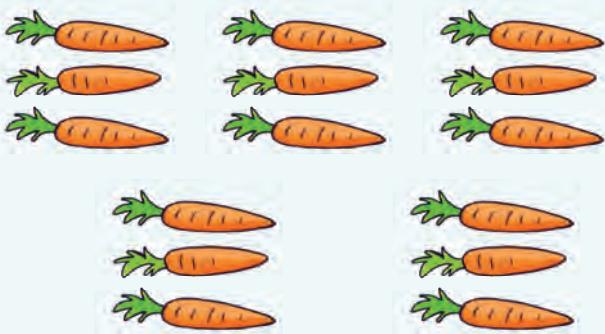


Tangedzelani zwimange zwa 10 fhedzi.



Ho sala zwimange zwingana?

Tangedzelani kherotsi dza 13 fhedzi.



Ho sala kherotsi nngana?





Tovhedzelani nomboro.

13	13	13	13
fumiraru			
13	13	13	13



Kholomo iñwe na  
iñwe i tea u vha na  
thanganyelo ya 13.  
Nwalani nomboro dzi  
no khou t̄ahela.

1	2	6
1		
	3	2
13	13	13



Oiani zwithu zwa 13.

Zwino zwi oleni nga ndila iñwevho.

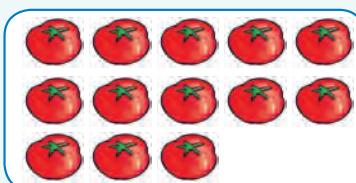


Nwalani nomboro  
dzi no khou t̄ahela.

	10		12	
--	----	--	----	--



Vhalani zwithu.



Fhedzisani thebulu. Rou iñwe na  
iñwe i na tshifanyiso, nomboro na ipfi lo  
imelaho nomboro iyo.

		fumiraru
	13	fumiraru
13		
	fumiraru	



Ndi nomboro ifhio i re t̄hukhu  
kha 13 nga thihi?

Ndi nomboro ifhio i re  
khulwane kha 13 nga thihi?





## Pfesesani nomboro 14

Mvusuludzo:

Itani ndowendowe ya u ñwala nomboro.



sumbe

7 7



malo

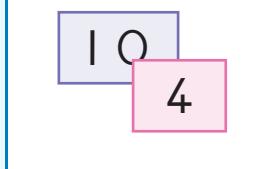
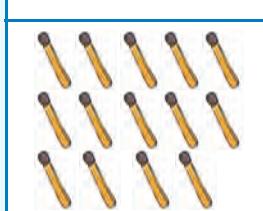
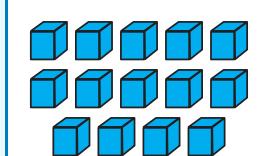
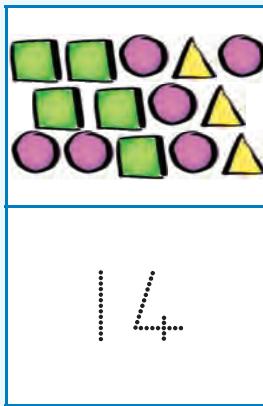
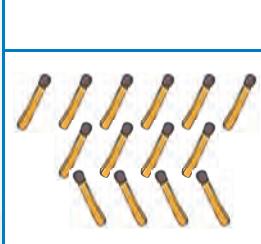
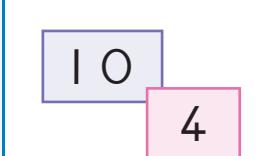
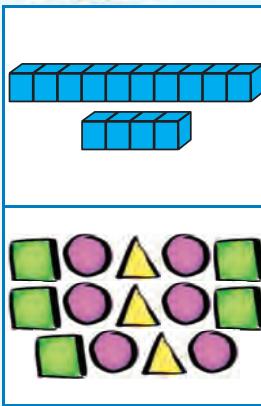
8 8



Livhanyani zwifanyiso.



Tangedzelani zwithu.



Tangedzelani zwisusu zwa 10 fhedzi.



Ho sala zwisusu zwingana?

Tangedzelani rokho dza 14 fhedzi.



Ho sala rokho nngana?



Tovhedzelani nomboro.

14	14	14	14
fumiingga			
14	14	14	14



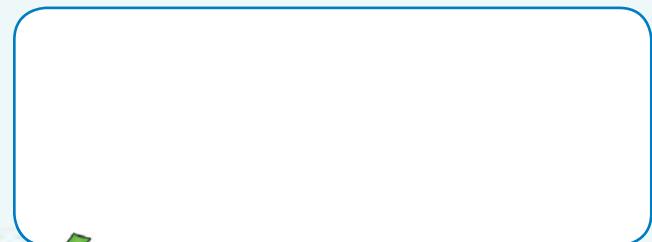
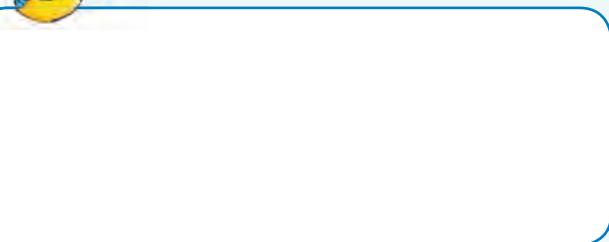
Kholomo iñwe na  
iñwe i tea u vha na  
thanganyelo ya 14.  
Nwalani nomboro dzi  
no khou t̄ahela.

1		2
	5	1
3	2	
14	14	14



Olani zwithu zwa 14.

Zwino zwi oleni nga ndila iñwevhō.



Vhalani zwithu.



3

5

7



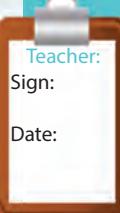
Fhedzisani thebulu. Rou iñwe na  
iñwe i na tshifanyiso, nomboro na ipfi lo  
imelaho nomboro iyo.

 	14	fumiingga
14	 	
	fumiingga	 



Ndi nomboro ifhio i re t̄hukhu  
kha 14 nga thihi?

Ndi nomboro ifhio i re  
khulwane kha 14 nga thihi?



11

12

13

14

15

16

17

18

19

20

69



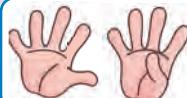
Deithi:

Themo ya 3

## Pfesesani nomboro 15

Mvusuludzo:

Itani ndowendowe ya u ñwala nomboro.



tahe

9 9



fumi

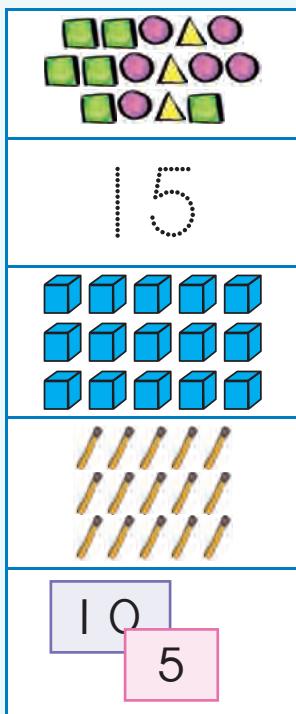
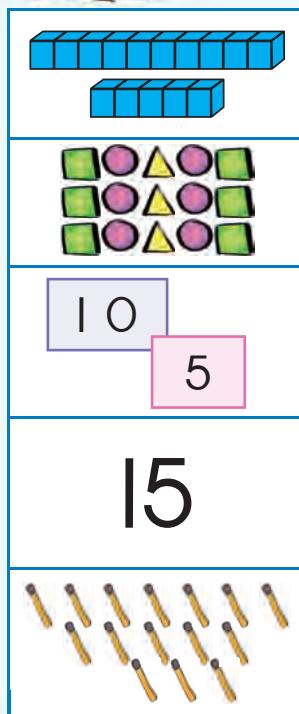
10 10



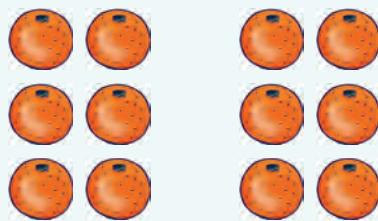
Livhanyani zwifanyiso.



Tangedzelani zwithu.



Tangedzelani maswiri a 10 fhedzi.



Ho sala maswiri mangana?

Tangedzelani ñaledzi dza 15 fhedzi.



Ho sala ñaledzi nngana?



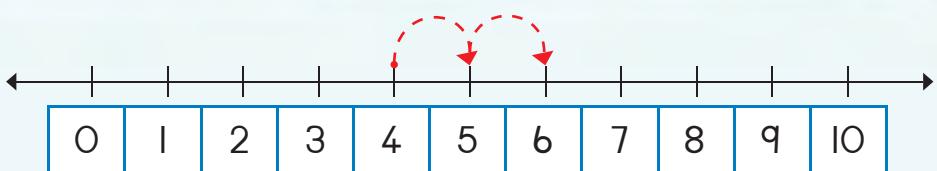
Ñwalani phindulo.



$7 + 2 =$



0 1 2 3 4 5 6 7 8 9 10



$$4 + 2 =$$



Tovhedzelani nomboro.



Olani zwithu zwa 15.

15	15	15	15
fumičanu			
15	15	15	15



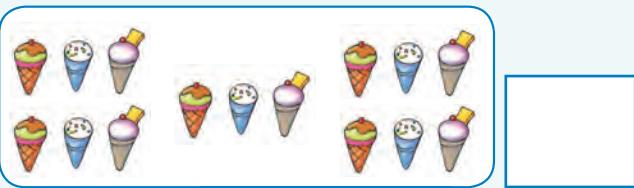
Nwalani nomboro dzi no khou ṭahela.



Vhalani zwithu.

11    12    13        15

15        13    12   



Fhedzisani thebulu. Rou iñwe na iñwe i na tshifanyiso, nomboro na ipfi lo imelaho nomboro iyo.

	15	fumičanu
		fumičanu
15		



Ndi nomboro ifhio i re ṭhukhu kha 15 nga thihi?

Ndi nomboro ifhio i re khulwane kha 15 nga thihi?



11 12 13 14 15 16 17 18 19 20



70



Deithi:

# Mułtanganyo u swika kha 20 – U isa phanda

Themo ya 3

Mvusuludzo:

Itani ndowendowe ya u nwala dzinambalo.

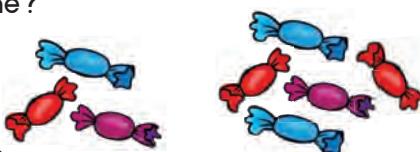
6

rathi



Lavhelesani zwifanyiso ni nwale fhungombalo la tshifanyiso tshiñwe na tshiñwe.

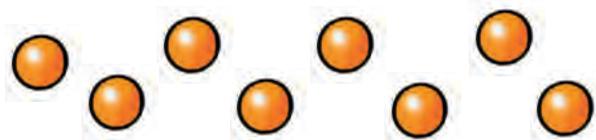
Lisa u na małegere a 3. Mandla u na małegere a 5. Vha na małegere mangana o ṭangana othe?



Kha ri vhale:

3	...	4	5	6	7	8
	+			=		

Ndo vha ndi na mimavhułu ya 8 nda xedza ya 4. Ndo salelwa nga mimavhułu mingana?

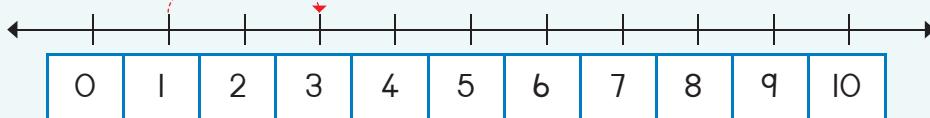


Kha ri vhale ri tshi ya murahu:

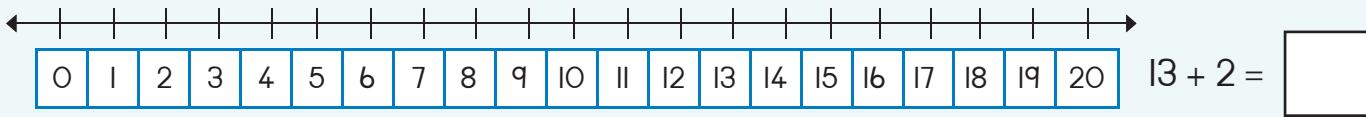
8	...	7	6	5	4
	-			=	



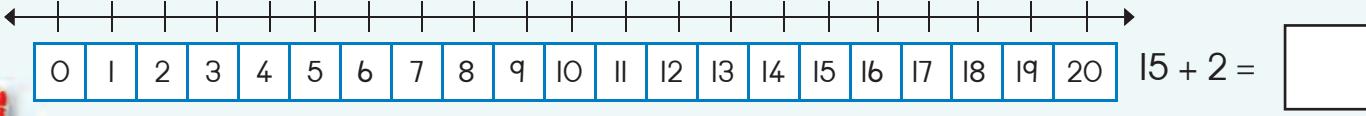
Nwalani phindulo.



$$1 + 2 = \boxed{\phantom{0}}$$



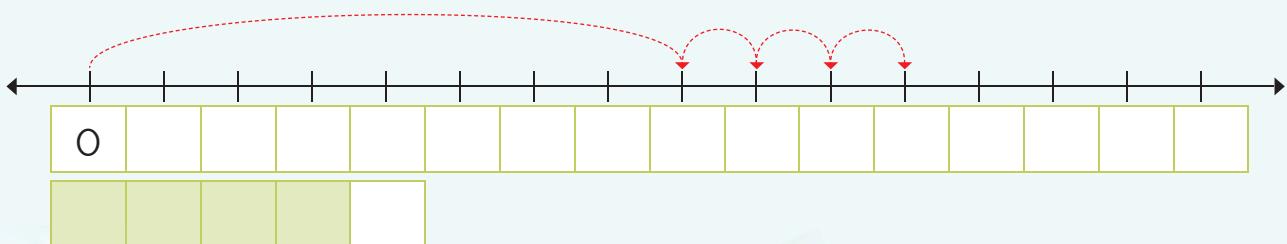
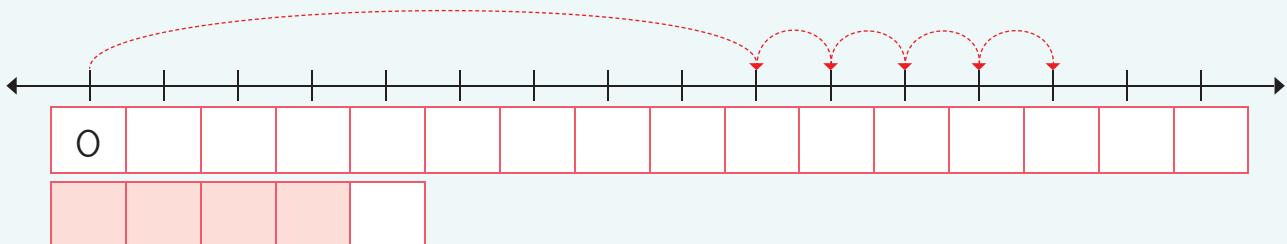
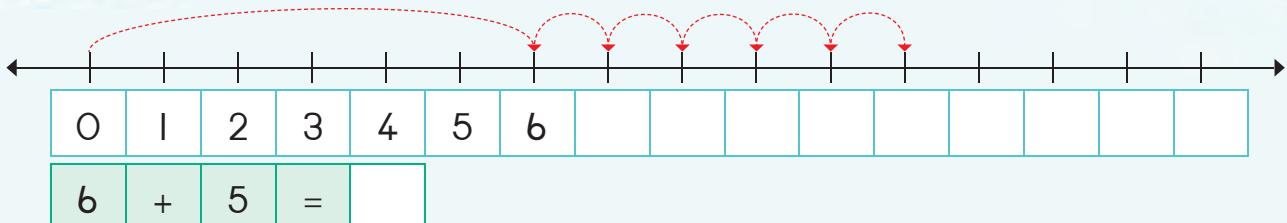
$$13 + 2 = \boxed{\phantom{0}}$$



$$15 + 2 = \boxed{\phantom{0}}$$



Ńwalani nomboro kha mutalombalo ni kone u ńwala fhungombalo ja nomboro iñwe na iñwe.



Vhalelani nga 2.

3	5
4	
2	



7	
8	
6	



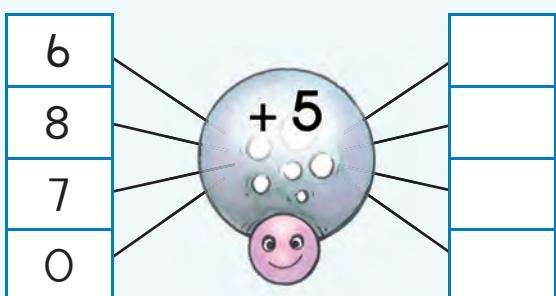
Ńwalani nomboro.

Ndi na miñwaha ya 7. Ndi ðo vha ndi na miñwaha mingana nga murahu ha miñwaha ya 5?

7

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Ndi ðo vha ndi miñwaha ya \_\_\_\_\_.



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Deithi:

# Mutanganyo – u fhat̄a na u padukanya nomboro u swika kha 10

Themo ya 3

Mvusuludzo:

Itani ndowendowe ya u ñwala dzinambalo.

7

sumbe



Ñwalani phindulo.

$3 + 3 = \square$



$0 + 5 = \square$

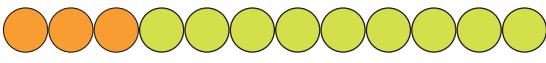


$3 + 2 + 1 = \square$



Khalarani ni tshi sumbedza zwi tevhelaho.

$3 + 9$



$4 + 8$



$5 + 7$



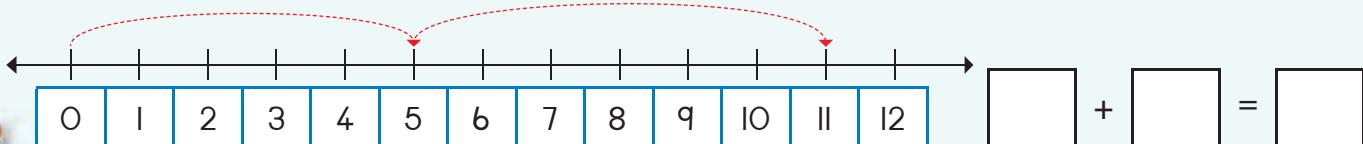
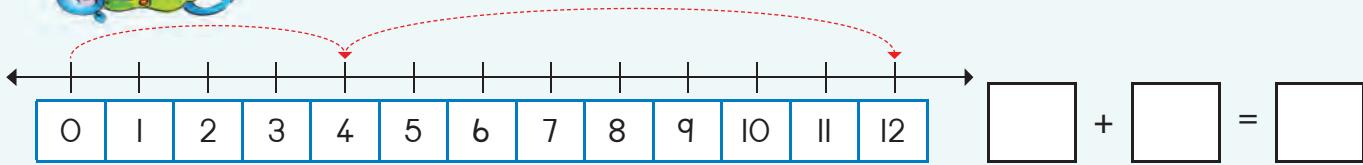
$6 + 6$



$7 + 5$

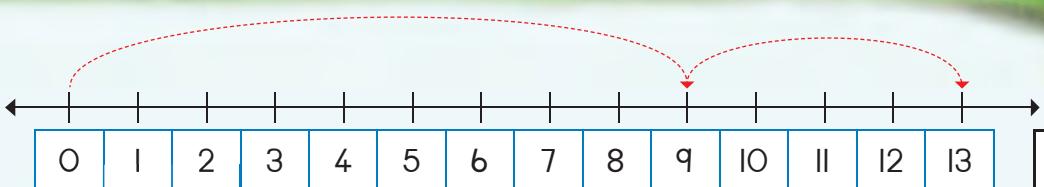


Ñwalani mbalo ya:



14

0 1 2 3 4 5 6 7 8 9 10



$$\boxed{\phantom{0}} + \boxed{\phantom{0}} = \boxed{\phantom{0}}$$

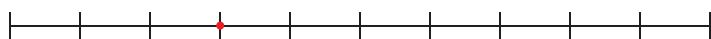


Fhedzisani mutualombalo ni የwale phindulo.



$$0 \boxed{1} 2 3 \boxed{4} 5 6 7 8 9 \boxed{10}$$

$$4 + 5 + 1 = \boxed{\phantom{0}}$$



$$0 \boxed{1} 2 \boxed{3} 4 \boxed{5} 6 7 8 9 \boxed{10}$$

$$3 + 3 + 2 = \boxed{\phantom{0}}$$



$$0 \boxed{1} \boxed{2} \boxed{3} 4 \boxed{5} 6 7 8 9 \boxed{10}$$

$$2 + 4 + 3 = \boxed{\phantom{0}}$$



$$0 \boxed{1} 2 \boxed{3} 4 \boxed{5} 6 7 8 9 \boxed{10}$$

$$4 + 3 + 2 = \boxed{\phantom{0}}$$



Tandululani zwi tevhelaho nga u ola zwifanyiso.

Ndi na mimavhuļu ya 5 ngeno khonani yanga e na ya 8. Ri na mimavhuļu mingana yo ṭangana yo ḥe?

$$\boxed{\phantom{0}} + \boxed{\phantom{0}} = \boxed{\phantom{0}}$$

Ndo wana maluvha a 9 a u fha mudededzi washu. Khonani yanga a wana a 6. Ri na maluvha mangana o ṭangana o ḥe?

$$\boxed{\phantom{0}} + \boxed{\phantom{0}} = \boxed{\phantom{0}}$$



Teacher:  
Sign:

Date:





# Mutanganyo – u fhat̄a na u padukanya nomboro u swika kha 20

Themo ya 3

Mvusuludzo:

Itani ndowendowe ya u ñwala dzinambalo.

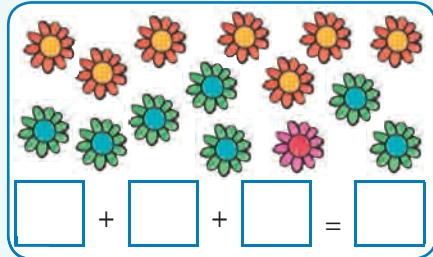
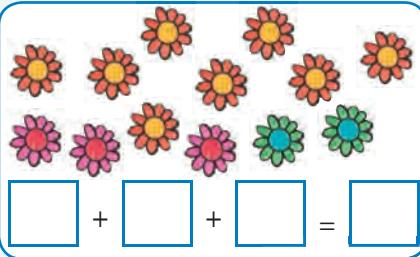
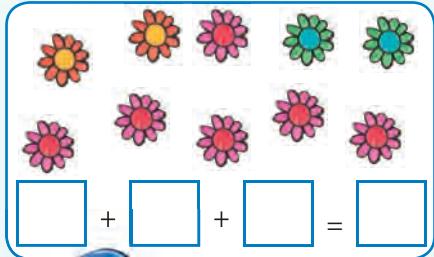
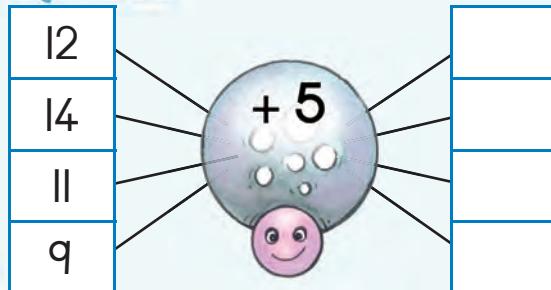
8

malo

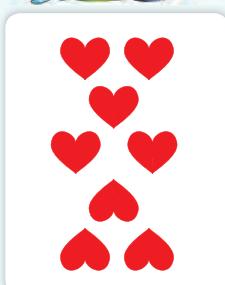


Ñwalani phindulo.

$0 + 2 =$		$2 + 2 =$		$4 + 2 =$		$6 + 2 =$		$8 + 2 =$	
$10 + 2 =$		$12 + 2 =$		$14 + 2 =$		$16 + 2 =$		$18 + 2 =$	

Shumisani maluvha a mivhala yo fhambananaho kha u ita mafhungombalo  
a inwi muñe.Thusani buvhi u fhedzisa  
mbalo.

Hu na mbilu nngana?



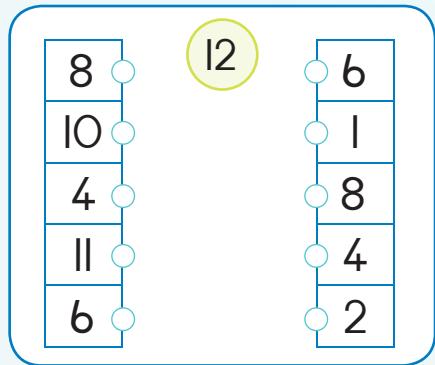
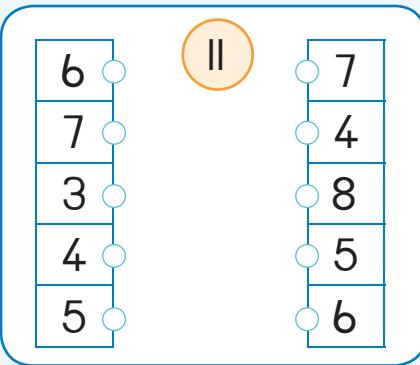
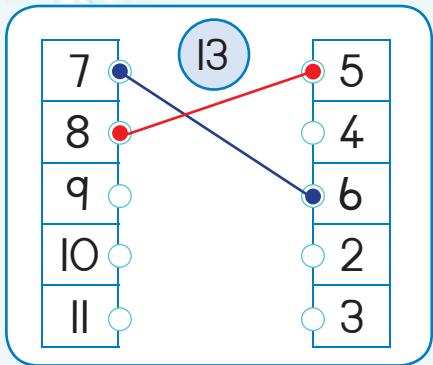
Ñwalani mbalo yanu.

$$[ ] + [ ] = [ ]$$

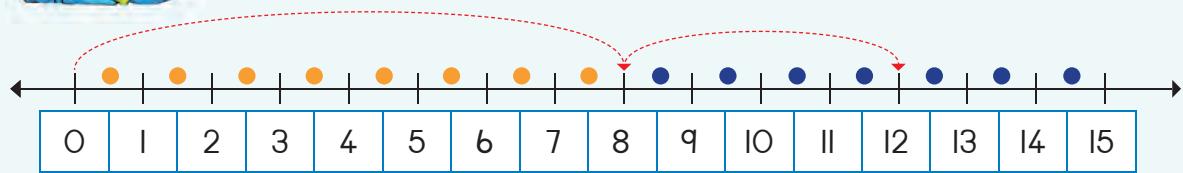




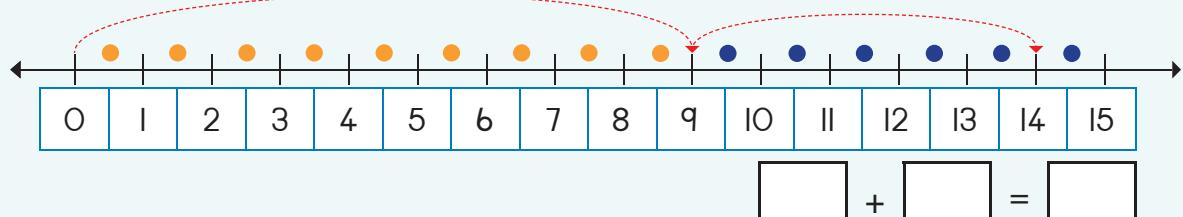
Livhanyani phere dza nomboro ni tshi sika nomboro dzi tevhelaho.



Nwalani fhungombalo ja:



$$[ ] + [ ] = [ ]$$



$$[ ] + [ ] = [ ]$$

Mvusuludzo:

Mvusuludzo: Khałarani phindulo yone.



mbonalo ya nga phanda

mbonalo ya nga murahu

mbonalo ya nga matungo



mbonalo ya nga phanda

mbonalo ya nga murahu

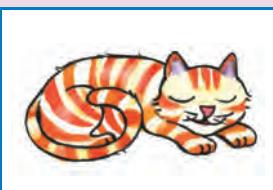
mbonalo ya nga matungo



mbonalo ya nga phanda

mbonalo ya nga murahu

mbonalo ya nga matungo



mbonalo ya nga phanda

mbonalo ya nga murahu

mbonalo ya nga matungo



II

I2

I3

I4

I5

I6

I7

I8

I9

I20

73



Deithi:

# Mutanganyo na mutuso – u fhatā na u padukanya

Themo ya 3

Mvusuludzo:

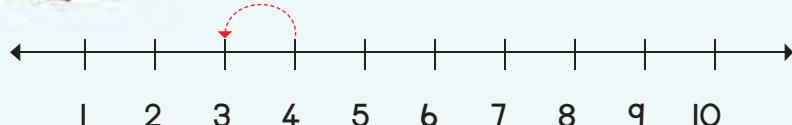
Itani ndowendowe ya u ḥwala dzinambalo.

q

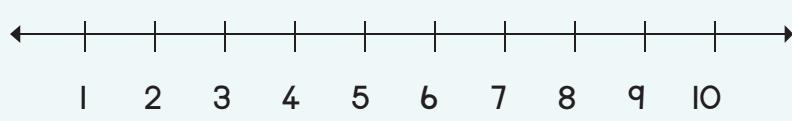
tahē



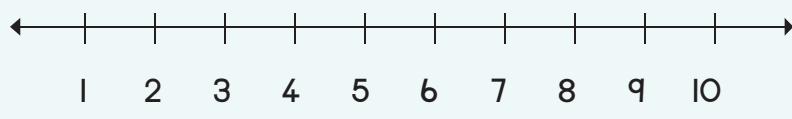
Nwalani phindulo.



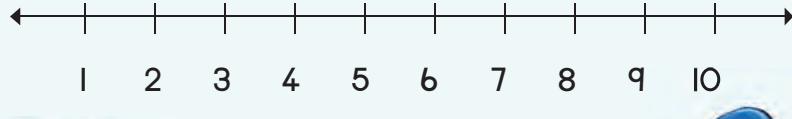
$4 - 1 =$



$5 - 3 =$



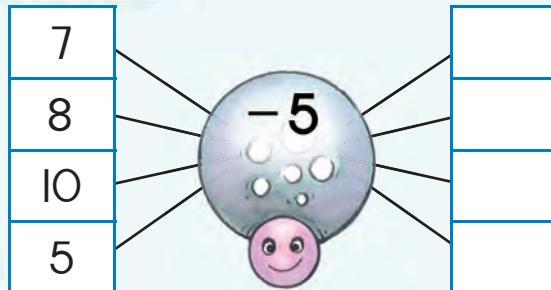
$4 - 2 =$



$5 - 2 =$

Thusani buvhi u fhedzisa  
mbalo.

Hu na mbilu nngana?



Nwalani mbalo yanu.

$\boxed{\phantom{0}} + \boxed{\phantom{0}} = \boxed{\phantom{0}}$





Rekanyani zwi tevhelaho.

$$7 + 4 = \boxed{\phantom{00}}$$

$$7 + 4 + 1 = \boxed{\phantom{00}}$$

$$10 + 1 = \boxed{\phantom{00}}$$

$$6 + 6 = \boxed{\phantom{00}}$$

$$6 + \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$10 + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$13 - 6 = \boxed{\phantom{00}}$$

$$13 - 3 + 3 = \boxed{\phantom{00}}$$

$$10 - 3 = \boxed{\phantom{00}}$$

$$12 - 8 = \boxed{\phantom{00}}$$

$$\boxed{\phantom{00}} - \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$10 - 3 = \boxed{\phantom{00}}$$



Nwalani phindulo ni khalare na u ola.

$$8 + 6 = \boxed{\phantom{00}}$$



Ri nga kha di i sumbedza sa:



$$(8 + 2) + 4 = \boxed{\phantom{00}} \rightarrow 10 + 4 = \boxed{\phantom{00}}$$

$$15 - 7 = \boxed{\phantom{00}}$$



Ri nga kha di i sumbedza sa:



$$(15 - 5) - 2 = \boxed{\phantom{00}} \rightarrow 10 - 2 = \boxed{\phantom{00}}$$

$$9 + 4 = \boxed{\phantom{00}}$$



Ri nga kha di i sumbedza sa:



$$(9 + 1) + 3 = \boxed{\phantom{00}} \rightarrow \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$14 - 5 = \boxed{\phantom{00}}$$



Ri nga kha di i sumbedza sa:

$$(\quad - \quad) - 1 = \boxed{\phantom{00}} \rightarrow 10 - 1 = \boxed{\phantom{00}}$$

Mvusuludzo:

Itani ndowendowe ya u nwalla dzinambalo.

10

fumi

Teacher:  
Sign:  
Date:



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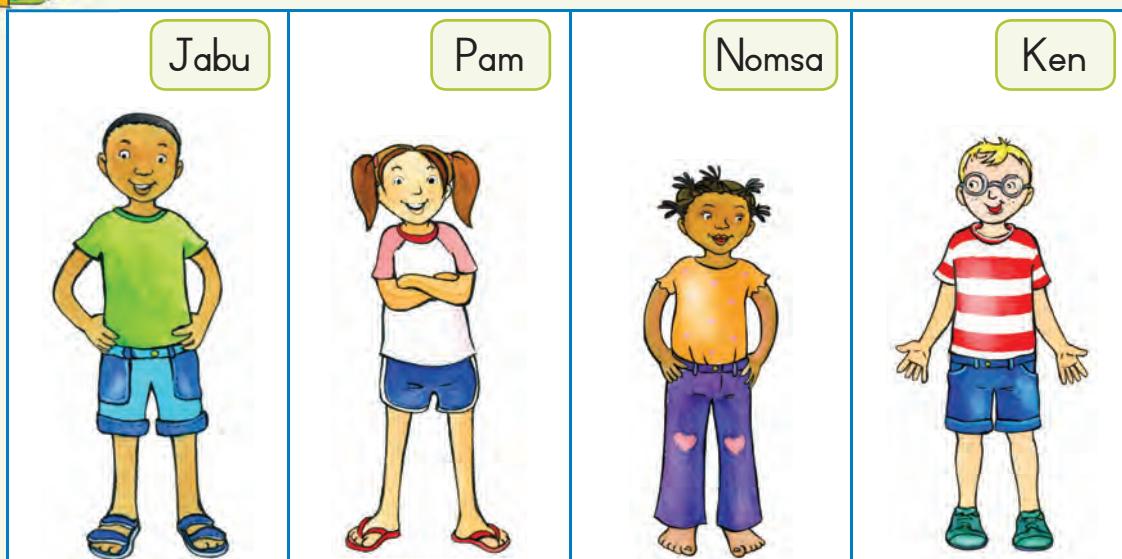
## Vhulapfu (vhuntha)

Themo ya 3



Deithi:

Lavhelesani tshifanyiso ni fhindule mbudziso.



Ndi nnyi mulapfusa?

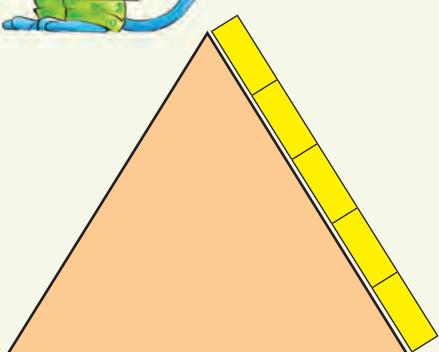
Ndi nnyi a re mutukana mupfufhisa?

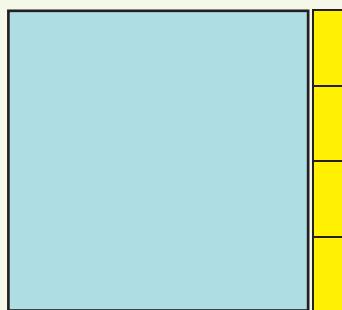
Ndi nnyi mupfufhisa?

Ndi nnyi a re musidzana mulapfusa?



Vhurumbu ha zwivhumbeo izwi ndi vhulapfu ha zwibogisi zwingana.











Vhulapfu na vhuphara ha ṭafula ndi vhugai nga muelo wa vhulapfu ha zwibuloko na penisela?



Vhuphara ndi zwibuloko zwa \_\_\_\_.

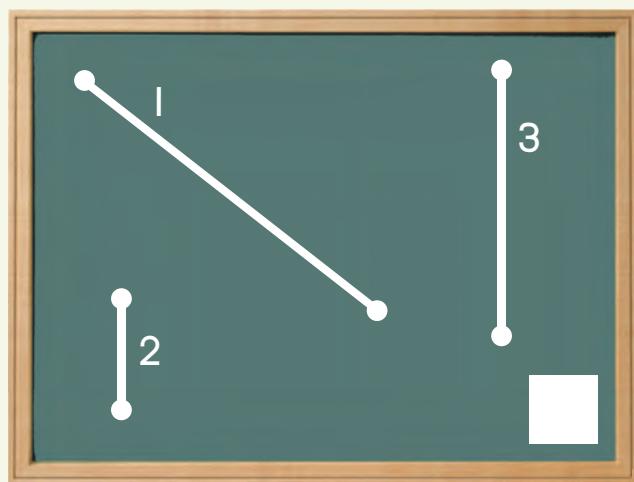
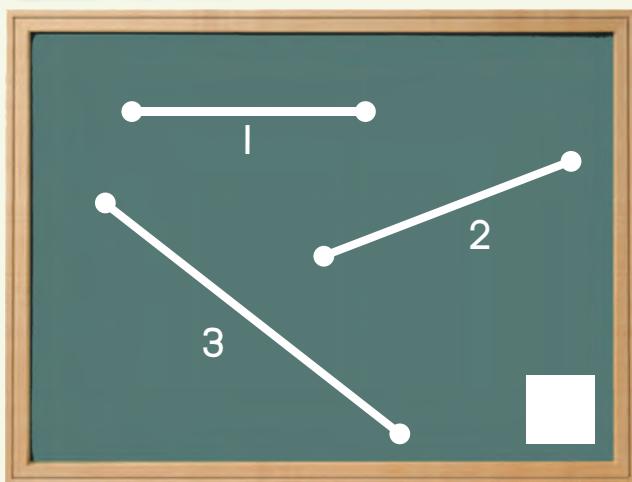


Vhuphara ndi zwibuloko zwa \_\_\_\_.



Ndi mutaladzi uf hio u re  
mupfufisia?  
Mutaladzi 1, 2 kana 3?

Ndi mutaladzi uf hio u re mulapfusa?  
Mutaladzi 1, 2 kana 3?



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Date:



## Tshelede na tshintshi

Deithi:



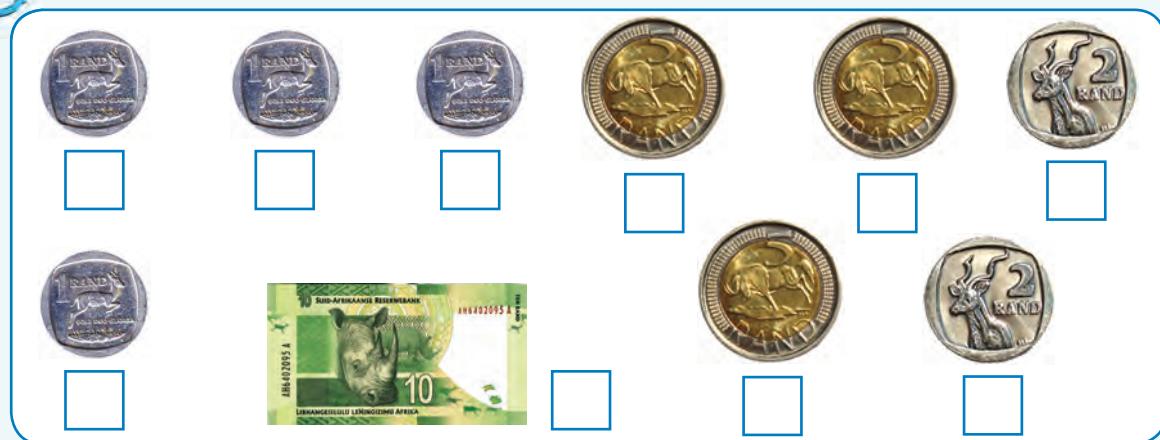
Itani thiki kha tshelede i re khulwanesa kha rou iñwe na iñwe.



Itani thiki kha khoini dzine dza ita RIO.



Itani thiki kha khoini dzine dza ita R20.





Rekanyani zwi tevhelaho.

$R5 + RIO =$

$R5 + R2 + R8 =$

$RIO + RIO =$

$R3 + RIO + R2 + R2 =$

$R5 + R7 + RI + R5 =$

$RIO + RI + R5 + R2 =$



Tandululani zwi tevhelaho:

Ndi na khoini ya R2 na khoini ya R5.  
Khonani yanga u na khoini tharu dza R2.  
Ndi nnyi ane a vha na tshelede nnzhi?

Ndi na khoini ya R5 na khoini ya RI.  
Khonani yanga u na khoini tharu dza R5.  
Ndi nnyi ane a vha na tshelede nnzhi?



Ndi na RI5:

Ndi badela nga

Tshintshi



Rekanyani zwi tevhelaho.

$R4 + R7 = RII$

$R4$

$R6 + R9 =$

$R8 + R3 =$

$R2 + RII =$

$R3 + R8 =$

$R6 + R8 =$

$RO + R2 =$

$R2 + R2 =$

$R4 + R2 =$

$R6 + R2 =$

Ndi na RI5. Ndi renga phakhethe ya matshipisi  
nga R6. Ndo salelwa nga vhugai?



Fhungudzani nga R2.

RII		R4	
RI2		R6	
RIO		R8	



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Olani dzikhoini ni ite:

Themo ya 3

RI1	
RI2	
RI3	
RI4	



Itani thiki kha phindulo yone.

$RI8 - R8 =$	<input type="text"/>	$RI2 - R2 =$	<input type="text"/>
	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>

$RI5 - R4 =$	<input type="text"/>	$RI4 - R7 =$	<input type="text"/>
	<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>



Rekanyani zwi tevhelaho.



$RI5 - RIO =$	<input type="text"/>	$R20 - R2 - R8 =$	<input type="text"/>	$R20 - R5 =$	<input type="text"/>
$RIO - RI - RI - R2 =$	<input type="text"/>	$R5 - R4 =$	<input type="text"/>	$RIO - RI - R5 - R2 =$	<input type="text"/>



Rekanyani zwi tehelaho.

Ndi na RI5 Nda renga nga:	Ndo salelwa nga vhugai?
R2 na R4 =	R9
R8 na R4 =	
RI2 na R2 =	
R5 na R5 =	
R8 na R7 =	
RIO na R2 =	
R8 na R2 =	
R6 na R2 =	
R4 na R2 =	
R2 na R2 =	
R9 na R6 =	
RIO na R2 =	



Ndi na RI5. Ndi renga phakhethé ya malégere nga RII.  
Ndo salelwa nga vhugai?





Themba ya 3

## Tshelede: Mu<sup>l</sup>tanganyo na mutuso



Rekanyani zwi tevhelaho.

$RIO + R2 =$	
$RIO + R4 =$	
$R9 + R5 =$	
$RI2 + R5 =$	

$RIO + R5 =$	
$RIO + R7 =$	
$R8 + R4 =$	
$RI4 + R2 =$	

$RIO + RI =$	
$RIO + R6 =$	
$R7 + R6 =$	
$RII + R6 =$	



Rekanyani zwi tevhelaho.

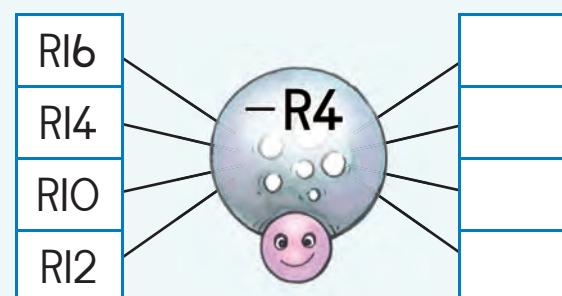
$RIO - R7 =$	
$RI5 - RI =$	
$RI2 - R2 =$	
$RI5 - R6 =$	

$RIO - R2 =$	
$RI5 - RI5 =$	
$RI4 - R7 =$	
$RI2 - R9 =$	

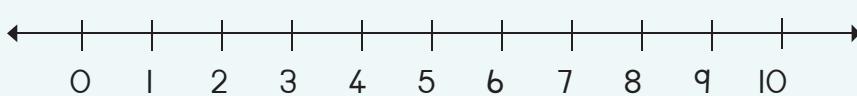
$RIO - R5 =$	
$RI5 - R2 =$	
$RI6 - R6 =$	
$RI4 - R4 =$	

Thusani buvhi u fhedzisa mbalo dzot<sup>h</sup>e.

Fhungudzani nga R2.



$$R4 - R2 =$$



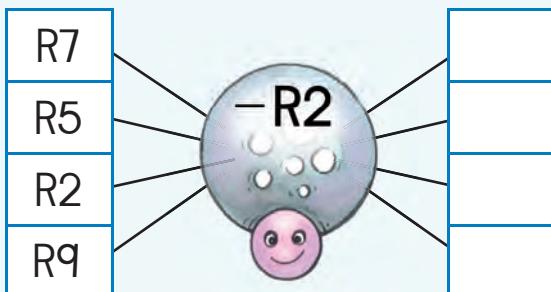
$$R7 - R2 =$$



0 1 2 3 4 5 6 7 8 9 10



Thusani buvhi u shuma mbalo dzot̄he dza mučuso.



Tandululani zwi tevhelaho.

No vha ni na RI2. Mme aňu vha ni f'ha R5.  
Ni na vhugai zwino?

Ni na RI9. Na renga legere la R8.  
No salelwa nga vhugai?

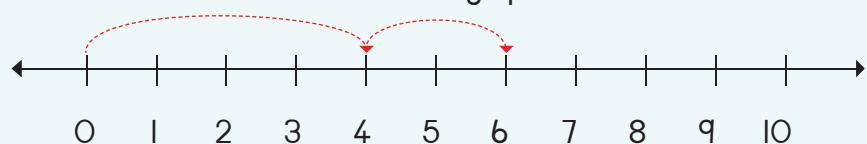


Ndo vhulunga vhugai?



Sumbedzani mbalo kha mutalombalo ni rekanye phindulo.

$$R4 + R2 = \boxed{\phantom{0}}$$



$$R8 + R2 = \boxed{\phantom{0}}$$



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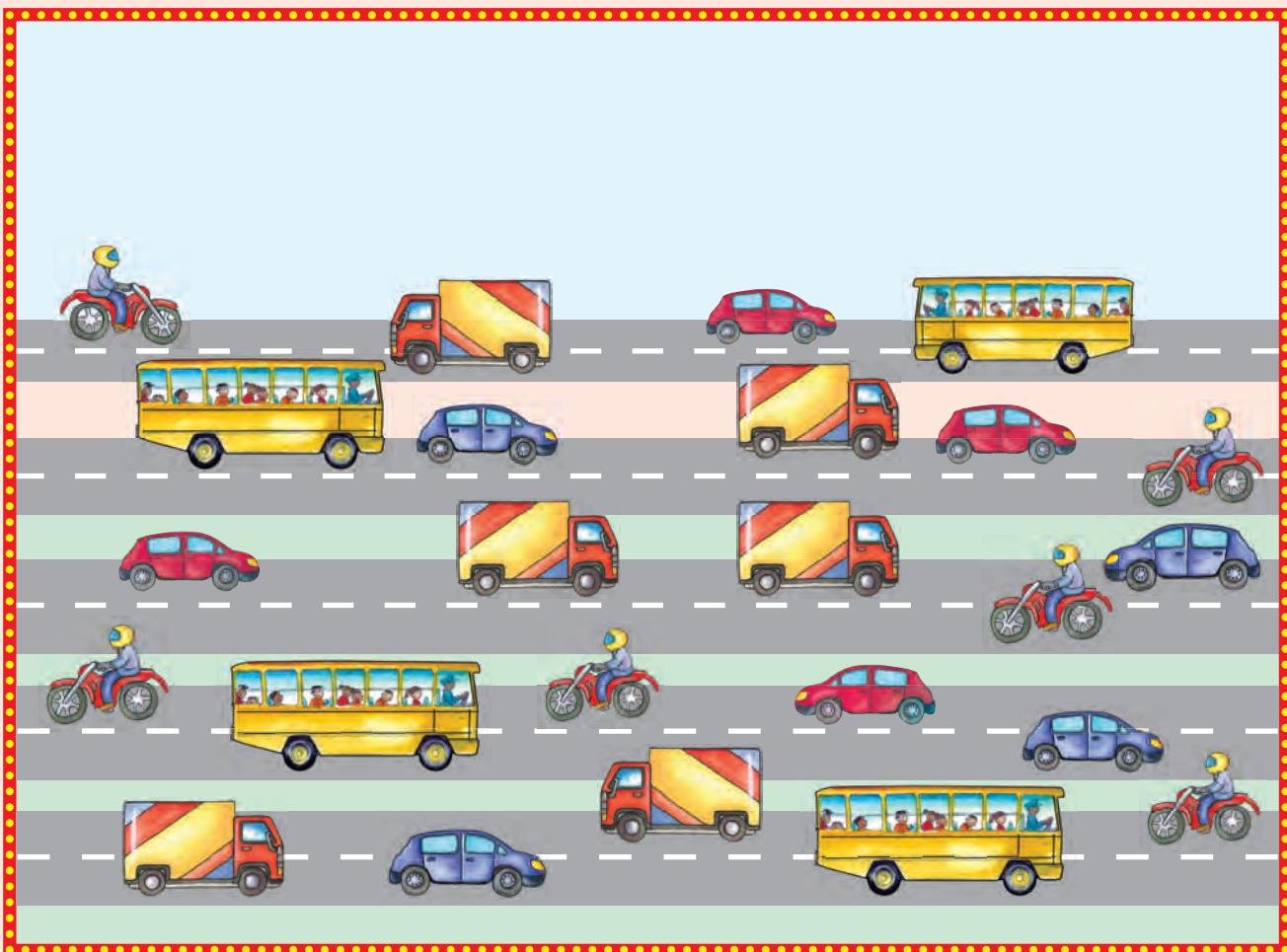


Deithi:

# Data

Themo ya 3

Vhalani uri ni kona u vhona zwiendedzi zwingana zwa lushaka luthihi.





Vhalani zwivhumbeo ni khalare tshati i re afho fhasi ni tshi sumbedza uri hu na zwingana zwa tshivhumbeo tshiñwe na tshiñwe. Ni kone u fhindula mbudziso.



5					
4					
3					
2					
1					
	△	○	□	♥	★
					○

Zwivhumbeo zwa \_\_\_\_\_ ndi zwone zwinzhi.

Zwivhumbeo zwa \_\_\_\_\_ ndi zwone zwiñku.

Teacher:  
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Date:

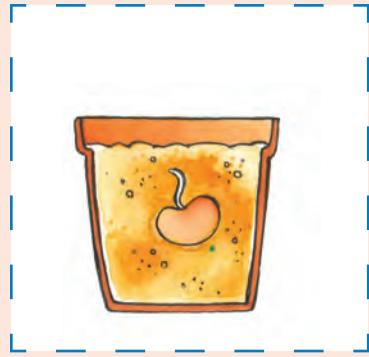




## Data na tshifhinga

Ambani nga zwifanyiso izwi ni kone u zwi vhekanya nga thevhekano yone.

Deithi:



1

2

3

4

↓

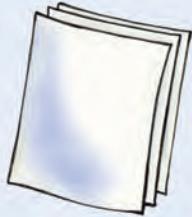
↓

↓

↓



Fhedzisani phikhithogireme (nyolo ya zwifanyiso) ni tshi  
shumisa magaraṭa a u vhekanya a no bva kha Tshigeriwa I.



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Teacher:  
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Date:





# Zwigwada zwa zwitanuzvitānu u swika kha 15

Themo ya 3

Mvusuludzo:

Itani ndowendowe ya u nwala dzinambalo.

5

thanu



Lavhelesani tshifanyiso ni kone u fhindula mbudziso.



Ni nga ita zwigwada zwingana  
zwa zwa 5 (zwitanu).



Lavhelesani tshifanyiso.

Ri nga i nwala nga hei ndila.

Olani zwanu hafha.



Tshigwada tshithihi  
tsha dza 5 ndi 5



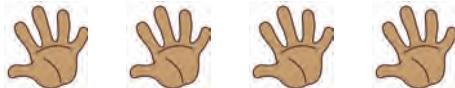
Vhalani minwe yanu ni nwale phindulo.



$$5 + 5 =$$



$$5 + 5 + 5 =$$



$$5 + 5 + 5 + 5 =$$

zwigwada zwa 2 zwa  
thanu ndi 10



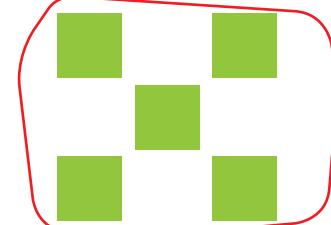
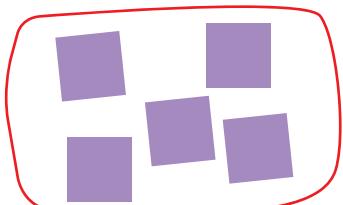


Olani zwitendeledzi u  
mona na zwi tevhelaho ni  
vhumbe:

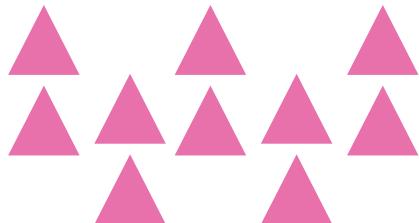


Nwalani mafhungombalo  
a zwi tevhelaho:

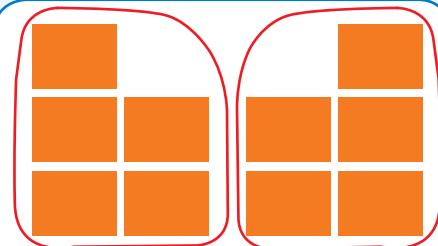
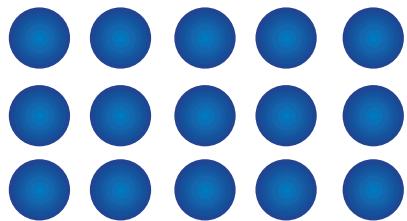
tshigwada tsha I tsha zwa 5



zwigwada zwa 2 zwa dza 5



zwigwada zwa 3 zwa zwa 5



Ni nga ita zwigwada zwingana zwa zwi<sup>tanu</sup>zwi<sup>tanu</sup> nga?

10	na	0	zwigwada zwa	
8	na	2	zwigwada zwa	
6	na	4	zwigwada zwa	
4	na	1	zwigwada zwa	
2	na	3	zwigwada zwa	





# Thanu: ndovhololo ya mułanganyo u swika kha 15

Mvusuludzo:

Mvusuludzo: Nwalani nomboro dzi no khou tłahela.



Hu na zwikunwe kana minwe mingana? Nwalani fhungombalo la hone.



Olani:

Tshigwada tsha miomva miłanu

Zwigwada zwivhili zwa maluvha  
małanu kha tshithihi



Olani zwivhumbeo zwa zwi tevhelaho.

$$\boxed{5} + \boxed{5} = \boxed{10}$$

$$\boxed{5} + \boxed{5} + \boxed{5} = \boxed{\quad}$$



--	--	--	--	--	--	--	--	--	--

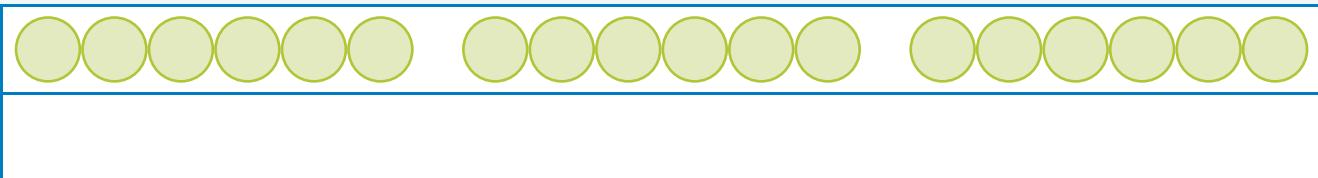




Tangedzelani ni vhale uri hu na zwingada zwingana zwa mbilu t̄hanu zwine na nga ita kha garat̄a linwe na linwe.



Nwalani fhungo mbalo la:



Shumisani mivhala yo fhambananaho kha u sumbedza nomboro dzine na do dici shumisa kha u vhumba zwingada zwa zwit̄anuzwit̄anu.

I	2	3	4	5	6	7	8	9	10
II	I2	I3	I4	I5					



Ni nga kona u ita zwingada zwingana zwa zwit̄anuzwit̄anu?

I	na	I4	dzi do ita	zwingada zwa	
I3	na	2	dzi do ita	zwingada zwa	
8	na	2	dzi do ita	zwingada zwa	
7	na	8	dzi do ita	zwingada zwa	
9	na	2	dzi do ita	zwingada zwa	





Ñwalani nomboro dzi no khou ṭahela.

I		3		5		7	8	q	
II	I2								



Itani zwigwada zwa zwitanuzwitanu.

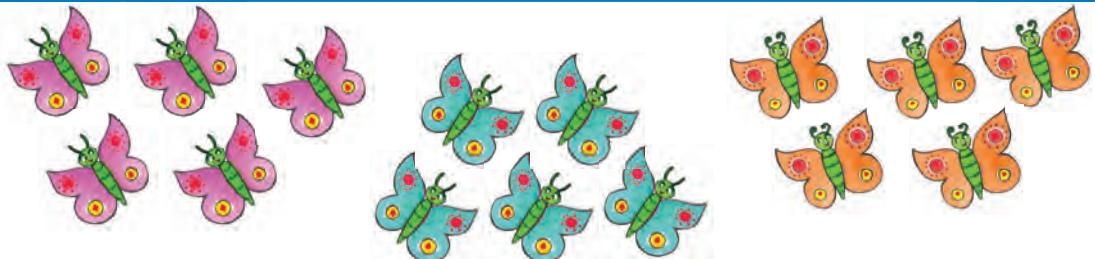
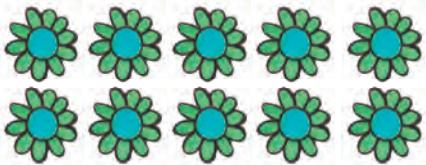
Kugonoñozwithoma ku tea u vha na tshigwada tsha zwithoma zwitanu.

Olani zwithoma zwi no khou ṭahela.





Nwalani mafhungombalo a izwi.



Rekanyani zwi tevhelaho.

$$0 + 5 = \boxed{\phantom{0}}$$

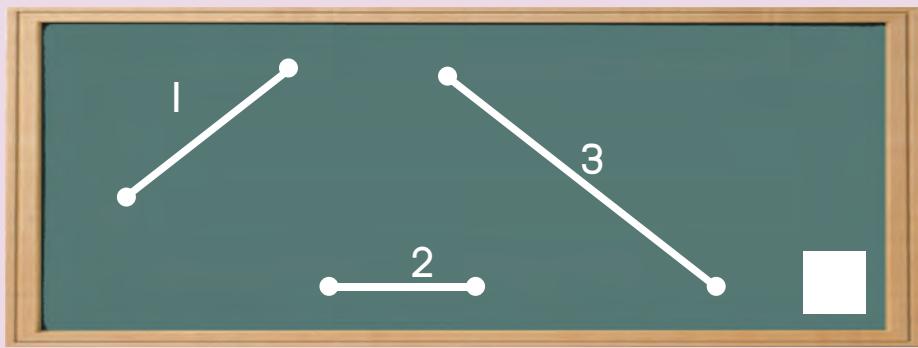
$$5 + 5 + 5 = \boxed{\phantom{0}}$$

$$5 + 5 = \boxed{\phantom{0}}$$

$$5 + 5 + 5 + 5 = \boxed{\phantom{0}}$$

Mvusuludzo:

Mvusuludzo: Ndi mutaladzi ufhio u re mulapfusa?





## Phetheni dza nomboro $\hat{t}$ hanu u swika kha 50

Themo ya 3

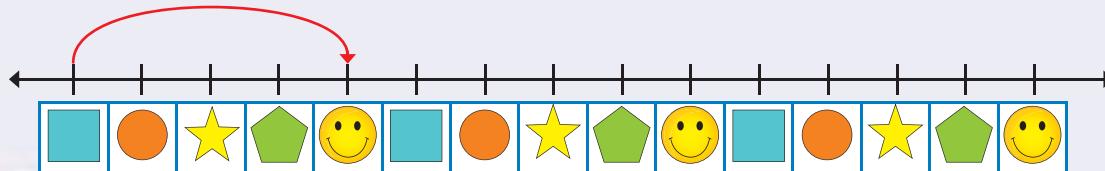


Fhedzisani phetheni ya  $\hat{t}$ hanu nga u khala nomboro.

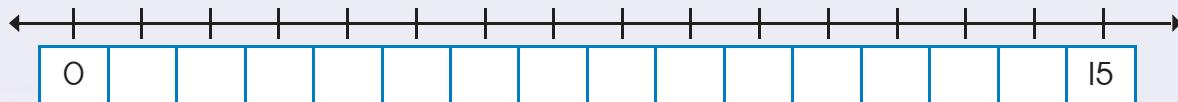
I	2	3	4	5	6	7	8	9	10
II	12	13	14	15	16	17	18	19	20
2I	22	23	24	25	26	27	28	29	30
3I	32	33	34	35	36	37	38	39	40
4I	42	43	44	45	46	47	48	49	50



Oiani dzihupu ni tshi sumbedza zwigwada zwa  $\hat{t}$ hanu.



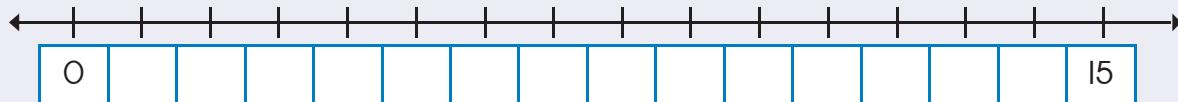
Dzhenisani nomboro dici no khou  $\hat{t}$ ahela ni ole dzihupu ni tshi sumbedza zwigwada zwa  $\hat{t}$ hanu.

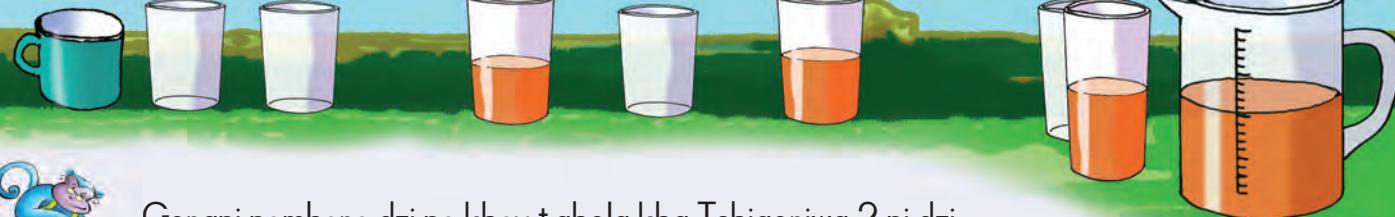


Fhedzisani mutualombalo.

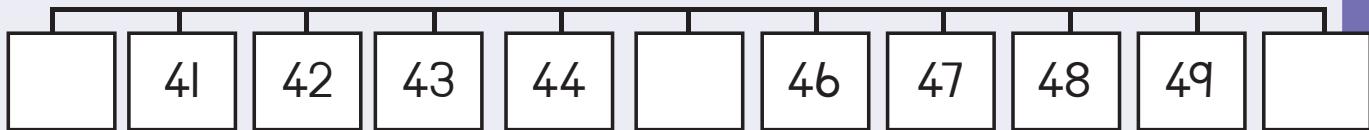
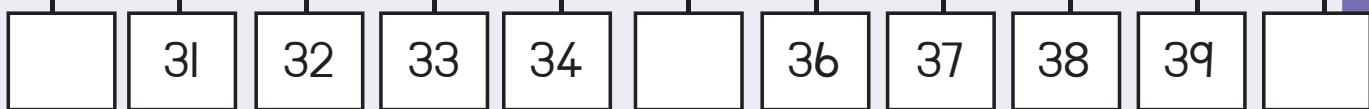
Oiani dzihupu ni tshi sumbedza zwigwada zwa  $\hat{t}$ hanu.

Hu na zwigwada zwa  zwa  $\hat{t}$ hanu.



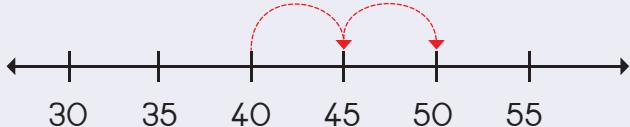


Gerani nomboro dzi no khou ṭahela kha Tshigeriwa 2 ni dzi vhee kha mitalombalo.

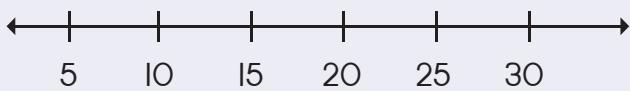


Olani dzihupu ni tshi sumbedza zwi tevhelaho:

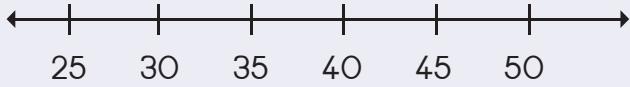
40, 45, 50



10, 15, 20



25, 30, 35



Teacher: Sign:
Date:



11

12 13

14

15

16

17

18

19

20



Deithi:

Themo ya 3

## Phetheni dza nomboro dza thanu u swika kha 80



Ndi zwigwada zwingana zwa zwithanu zwine na kona u zwi vhone tshifanyisoni itshi?



Fhedzisani zwifanyiso izwi ni tshi sumbedza zwigwada zwivhili zwa zwithanu tshibulokoni tshiñwe na tshiñwe.



40

0

1

2

3

4

5

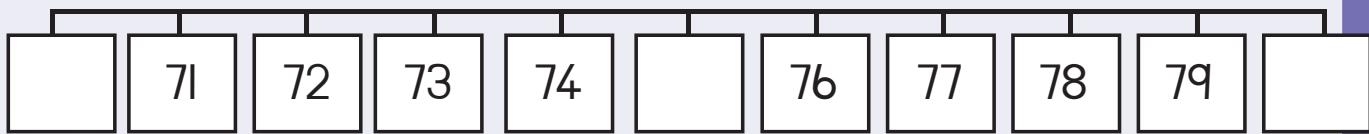
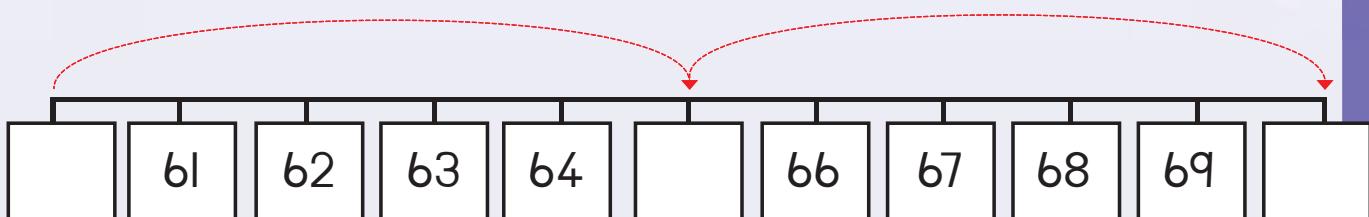
6

7

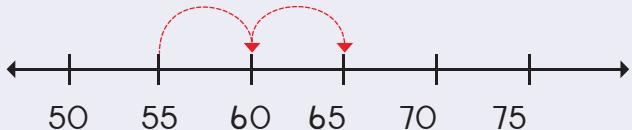
8

9

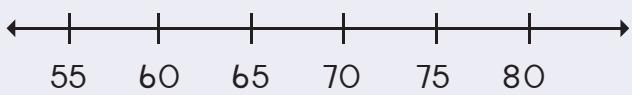
10



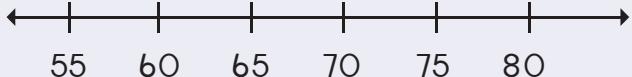
55, 60, 65



65, 70, 75



70, 75, 80



Teacher:  
Sign:  
Date:





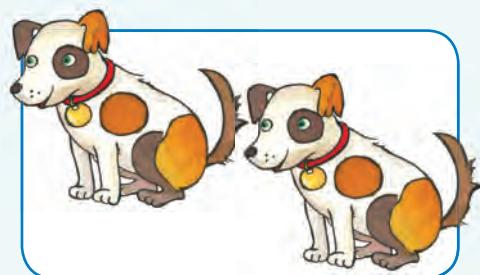
## Nyingakavhili



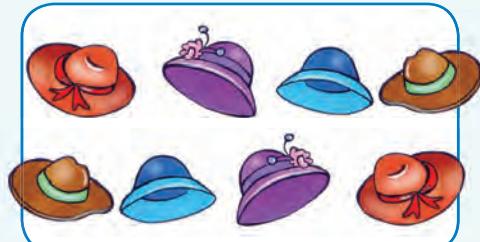
Ingani kavhili zwithu ni nwale phindulo.



1 yo ingwa kavhili ndi



4 yo ingwa kavhili ndi



5 yo ingwa kavhili ndi



Vhalani zwivhumbeo zwi re kha besu linwe na linwe la tshisu.

Fhedzisani mafhungombalo a nyingakavhili.



$7 + 7 =$

kana

7 yo ingwa kavhili =



$5 + 5 =$

kana

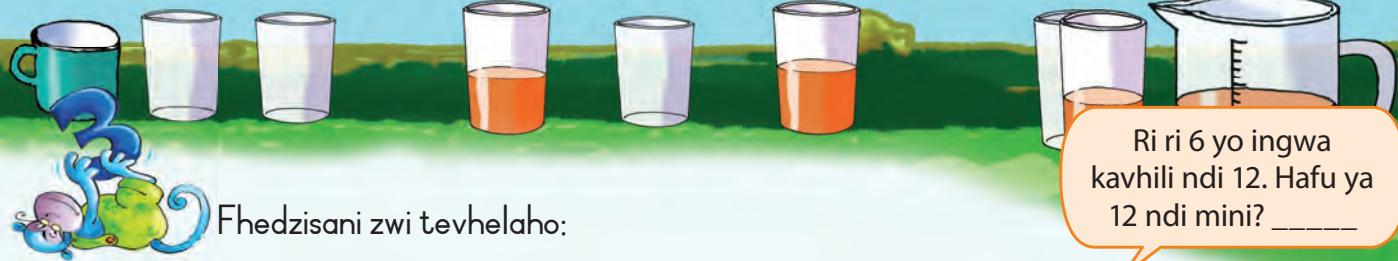
5 yo ingwa kavhili =

$2 + 2 =$

kana

2 yo ingwa kavhili =





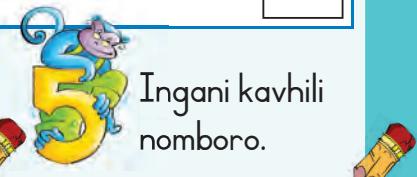
Fhedzisani zwi tevhelaho:

Ri ri 6 yo ingwa kavhili ndi 12. Hafu ya 12 ndi mini? \_\_\_\_\_

Ni kona u vhona malinga mangana?	Ni kona u vhona malinga mangana zwino?	Hu na makumba mangana kha khathuni?	Hu na makumba mangana zwino?
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



Vhalani zwithoma ni zwi inge kavhili.



Ingani kavhili nomboro.

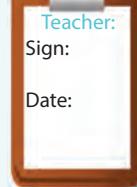
1	yo ingwa kavhili →	2
2	yo ingwa kavhili →	3
3	yo ingwa kavhili →	4
4	yo ingwa kavhili →	5
5	yo ingwa kavhili →	

4	yo ingwa kavhili →	8
5	yo ingwa kavhili →	
6	yo ingwa kavhili →	
3	yo ingwa kavhili →	
2	yo ingwa kavhili →	
10	yo ingwa kavhili →	



Fhedzisani zwi tevhelaho:

Hu na maduvha mangana kha vhege?	<input type="text"/>	Hu na maduvha mangana kha vhege mbili?	<input type="text"/>
Ni kona u vhona milenzhe mingana?	<input type="text"/>	Ri ri 7 yo ingwa kavhili ndi 14. Hafu ya 14 ndi mini?	<input type="text"/>



Fhedzisani zwi tevhelaho:

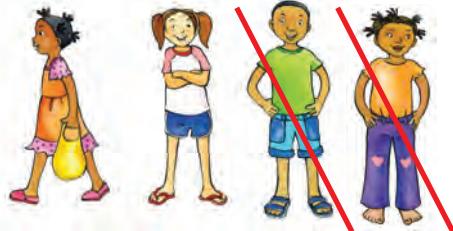
$2 + 2 + 1 =$	5	kana	Ho ingwa kavhili $2 + 1 = 5$
$4 + 4 + 1 =$		kana	
$7 + 7 + 1 =$		kana	



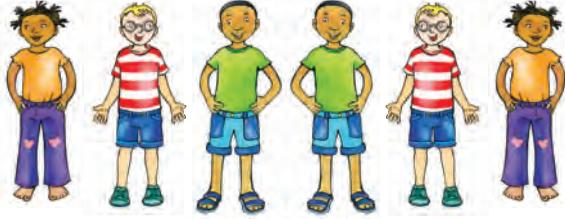


Hwayani hafu ya vhana ni የውለ phindulo.

## Hafu



Hafu ya 4 ndi \_\_\_\_\_



Hafu ya 6 ndi \_\_\_\_\_



Hafu ya 2 ndi \_\_\_\_\_



Hafu ya 8 ndi \_\_\_\_\_



Hwayani hafu ni የውለ phindulo.



Hafu ya 2 ndi =



Hafu ya 2 ndi =



Hafu ya 4 ndi =



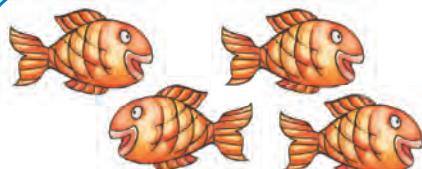
Hafu ya 6 ndi =



Hafu ya 10 ndi =



Hu na khovhe nngana?





Hafu ya khovhe dzothe ndi?





Vhalani zwithoma ni zwi hafule.

	2	yo hafulwa →		I
	4	yo hafulwa →		
	6	yo hafulwa →		
	8	yo hafulwa →		
	10	yo hafulwa →		

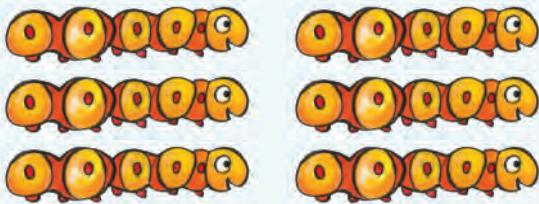


Hafulani nomboro.

4	yo hafulwa →	2
8	yo hafulwa →	
6	yo hafulwa →	
10	yo hafulwa →	
12	yo hafulwa →	
14	yo hafulwa →	



Hu na mashonzha mangana?




Hafu ya mashonzha ndi:





Fhindulani zwi tevhelaho:

Hu na milenzhe mingana?




Hu na milenzhe mingana zwino?

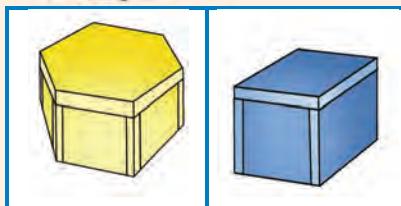



Ri ri hafu ya 8 ndi



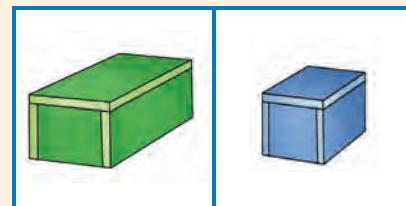


Itani thiki kha tshithu tshitukusa.



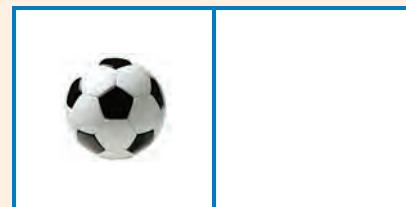
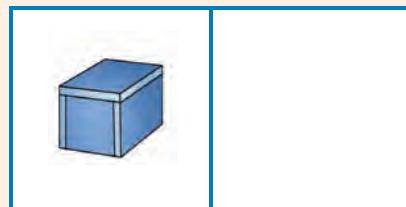









Olani tshithu tshihulwane kha tshanda tsha u la tsha tshifanyiso tshiñwe na tshiñwe.



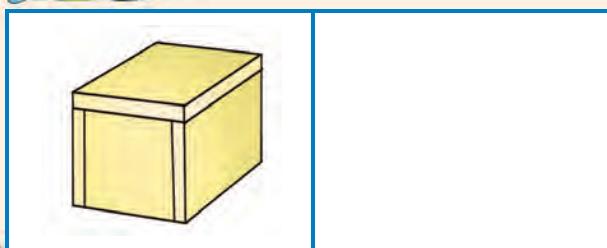
Olani bola i re khulwane kha bola ya lutombo.



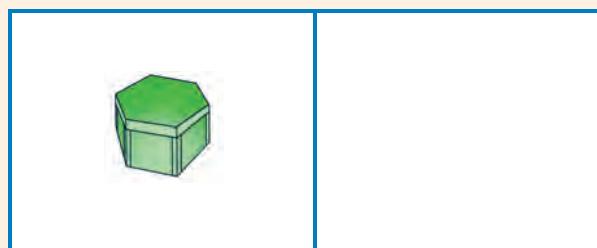
Olani bola i re thukhu kha bola ya gireyi.



Olani bogisi li re lihulwane kha bogisi la tada.

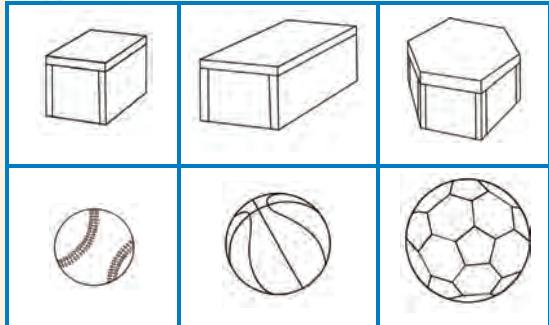


Olani bogisi li re lihulwane kha bogisi lidala.

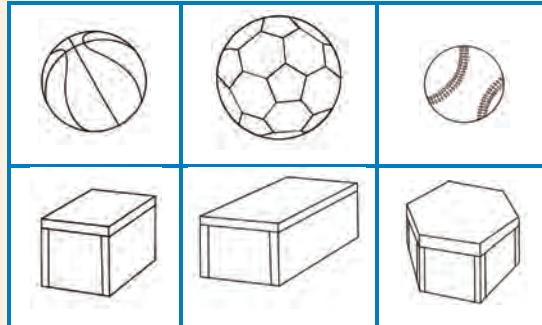




**5** Khałarani bogisi l̄itukusa nga muvhala wa lutombo na bola thukhusa nga muvhala wa t̄ada.



Khałarani bogisi l̄ihulwanesa nga muvhala wa pinki na bola khulwanesa nga muvhala mutswuku.



Ni nga kona u fħata thawara nga zwithu zwi tevhelaho?

Khałarani ee kana hai.



ee      hai

ee      hai

ee      hai



Gierani ni nambatedze zwifanyiso zwi no bva kha magazini kana gurannda ni tshi ita thawara mbili dza inwi muñe.

Ni elelwe uri thawara idzi dzi tea u ima nga dzothe (u balantsa).



Teacher:  
Sign:

Date:





## Zwithu zwa 3-D – U swenda na u kunguluwa



Izwi zwithu zwi do kunguluwa kana zwi do swenda?  
Khalarani phindulo i re yone.



u kunguluwa

u swenda



u kunguluwa

u swenda



u kunguluwa

u swenda

u kunguluwa

u swenda



Zwi tehelaho zwi a konadzea?  
Khalarani phindulo i re yone.



ee

hai



ee

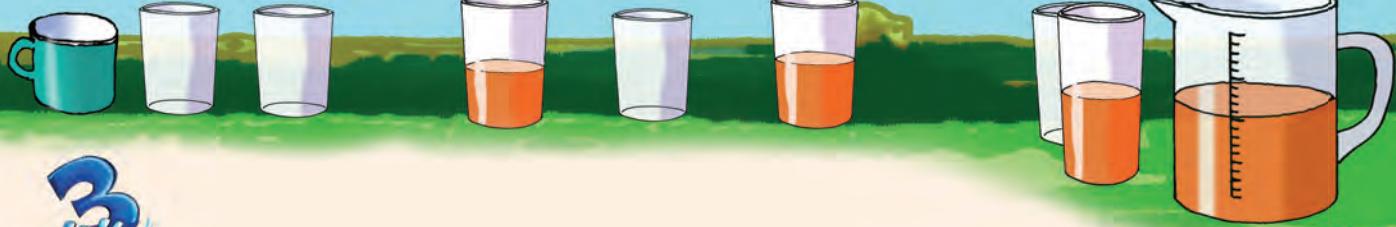
hai



ee

hai





**3**

Vhekanyani zwithu zwi tevhelaho nga u zwi ola tshibulokoni tshone.

	<p>Bola</p>	<p>Mabogisi</p>
--	-------------	-----------------

**4**

Vhekanyani zwithu nga saizi yazwo ni tshi tou zwi ola.

	<p>Bola ቴክክሷ</p>	<p>Mabogisi ማጥቻ</p>
	<p>Bola ክህልዋ</p>	<p>Mabogisi ማහልዋ</p>



Teacher:  
Sign:

Date:



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Deithi:

## Phetheni dza dzhometiri

Themo ya 3

Mvusuludzo:

Olani zwi tevhelaho:

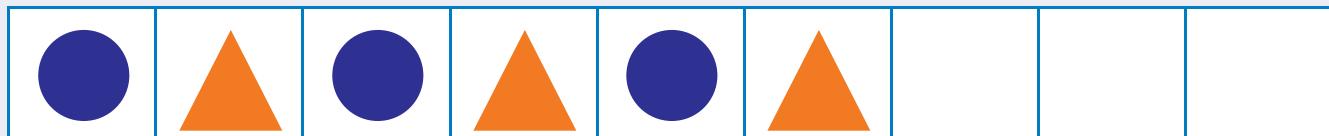
tshitendeledzi

tshikwea

rekithiengele



Fhedzisani phetheni.



50

0

1

2

3

4

5

6

7

8

9

10



Olani zwifanyiso ni tshi isa phanda na phetheni.




Olani phetheni yanu inwi mune.



Nambatedzani zwifanyiso ni tshi ita phetheni yanu inwi mune.



Fhedzisani phetheni iyi.

A	B	C	A	B	C				A	B	C
---	---	---	---	---	---	--	--	--	---	---	---



90



Deithi:

Themo ya 3

## Zwigwada zwa mbili u swika kha 15



Ńwalani dzinambalo la tshiga itshi.

2

mbili



Fhindulani mbudziso.

Ni kona u vhona phingwini nngana?



Ni kona u vhona phere nngana dza milenzhe?

I ńwaleni sa fhungombalo:



Fhindulani mbudziso.

Hu na bugu nngana?



Ndi nga kona u ita zwigada zwingana zwa mbili?

I ńwaleni sa fhungombalo.



Ńwalani dzinambalo la tshiga itshi.

4



Vhalani mabesu, ni ńwale phindulo yanu.



$2 + 2 =$



$2 + 2 + 2 =$



$2 + 2 + 2 + 2 =$



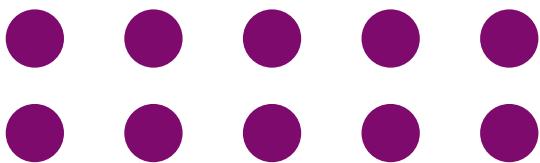


Itani zvitendeledzi u mona na zwi tevhelaho uri ni ite:

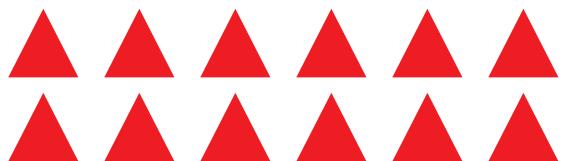
zwigwada zwa 4 zwa dza 2



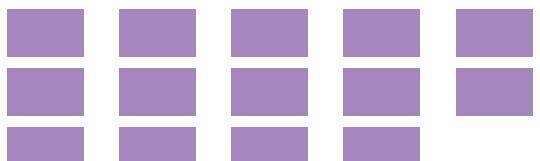
zwigwada zwa 5 zwa zwa 2



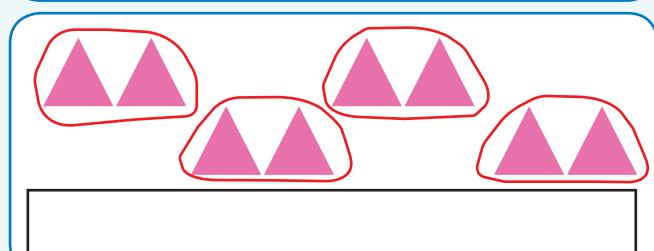
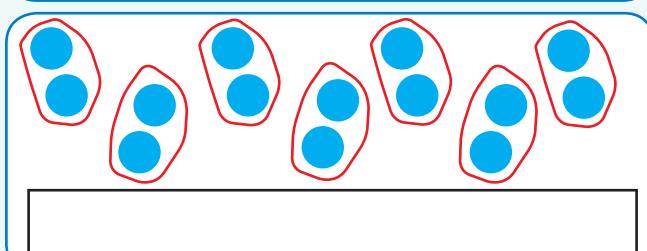
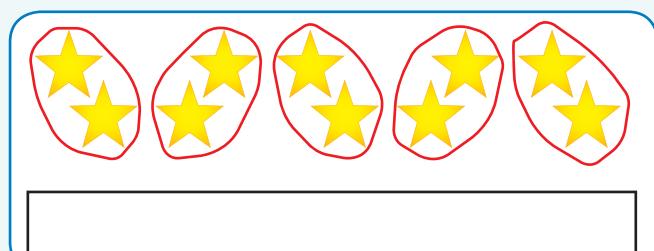
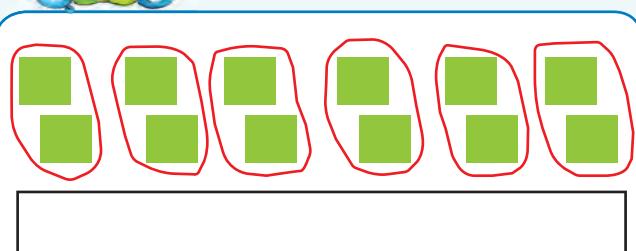
zwigwada zwa 6 zwa dza 2



zwigwada zwa 7 zwa dza 2



Nwalani fhungombalo ja zwi tevhelaho.



Ni nga ita zwigwada zwingana zwa zwivhili?

I3 na I dzi ita	zwigwada zwa
II na I dzi ita	zwigwada zwa
9 na I dzi ita	zwigwada zwa
7 na I dzi ita	zwigwada zwa

I2 na i dzi ita	zwigwada zwa
5 na I dzi ita	zwigwada zwa
I na I dzi ita	zwigwada zwa
IO na O dzi ita	zwigwada zwa



91



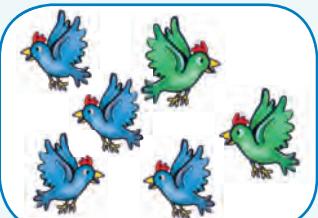
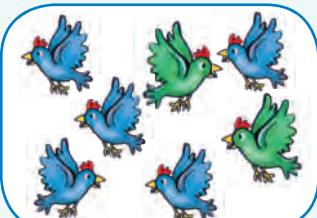
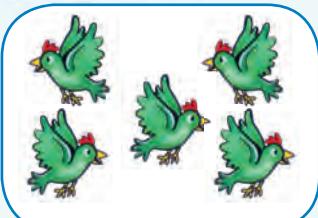
Deithi:

Themo ya 3

## Ndovhololo ya mutanganyo wa mbili u swika kha 15



Hu na milenzhe mingana?



No i vhalisa hani?



Olani zwivhumbeo ni tshi sumbedza zwi tevhelaho:

$$2 + 2 + 2 + 2 + 2 = \boxed{\quad}$$



$$2 + 2 + 2 + 2 + 2 + 2 + 2 = \boxed{\quad}$$

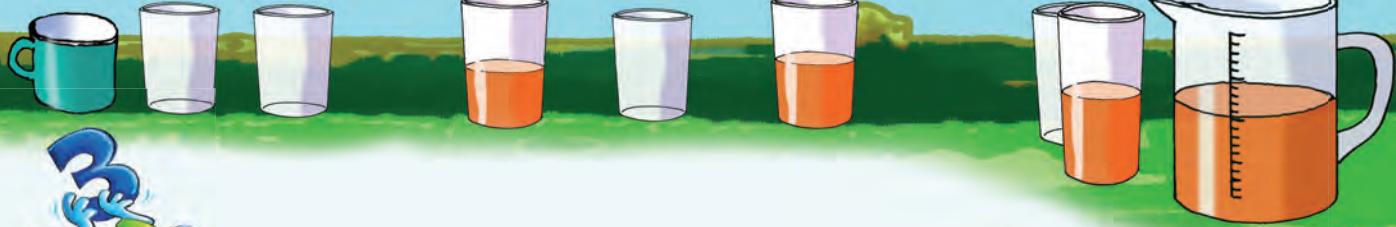


$$2 + 2 + 2 + 2 = \boxed{\quad}$$



$$2 + 2 + 2 + 2 + 2 + 2 = \boxed{\quad}$$

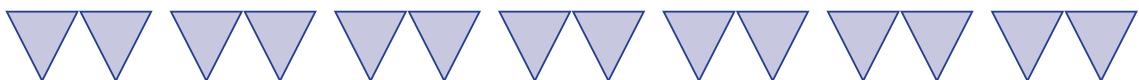




Ńwalani mafhungombalo a zwi tevhelaho:



$$2 + 2 + 2 + 2 + 2 = \boxed{\quad}$$









Tagedzelani ni vhale uri hu na zwigwada zwingana zwa mbilu  
mbili zwine na nga ita kha garata ńinwe na ńinwe.










Fhedzisani phetheni iyi ya nomboro dzine na do dzi shumisa kha u vhumba  
zwigwada zwa zwivhilizvhili.

I	2	3	4	5	6	7	8	9	10
II	I2	I3	I4	I5					





## Zwivhilizwivhili u swika kha 15



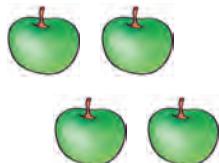
Nwalani nomboro dzi no khou ṭahela.

- |    |                       |                       |    |                       |                       |    |                       |                       |   |                       |                       |   |                       |
|----|-----------------------|-----------------------|----|-----------------------|-----------------------|----|-----------------------|-----------------------|---|-----------------------|-----------------------|---|-----------------------|
| I  | <input type="radio"/> | <input type="radio"/> | 3  | <input type="radio"/> | <input type="radio"/> | 5  | <input type="radio"/> | <input type="radio"/> | 7 | <input type="radio"/> | <input type="radio"/> | 9 | <input type="radio"/> |
| II | <input type="radio"/> | <input type="radio"/> | 13 | <input type="radio"/> | <input type="radio"/> | 15 | <input type="radio"/> | <input type="radio"/> |   | <input type="radio"/> | <input type="radio"/> |   | <input type="radio"/> |



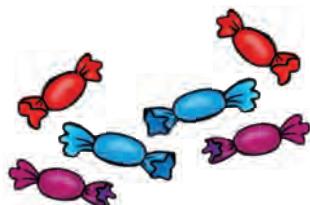
Itani zwigwada zwa mbili.

Itani tshitendeledzi u mona na tshigwada tshiñwe na tshiñwe tsha mbili.



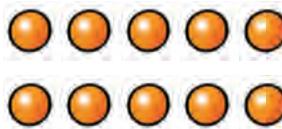
Hu na zwigwada zwingana zwa maapula?

Nwana muñwe na muñwe u ḋo wana maapula mangana?



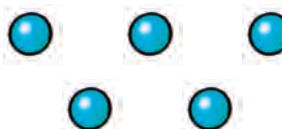
Hu na zwigwada zwingana zwa malegere?

Nwana muñwe na muñwe u ḋo wana malegere mangana?



Hu na zwigwada zwingana zwa mimavhuļu?

Nwana muñwe na muñwe u ḋo wana mimavhuļu mingana?



Hu na zwigwada zwingana zwa mimavhuļu?

Nwana muñwe na muñwe u ḋo wana mimavhuļu mingana?





Ńwalani nomboro  
dzi no khou ṭahela.

1	2	3	4		6	7	
2	4		8	10		14	16
0	3	6		12		18	21



Ńwalani fhungombalo ni tshi shumisa mbili.

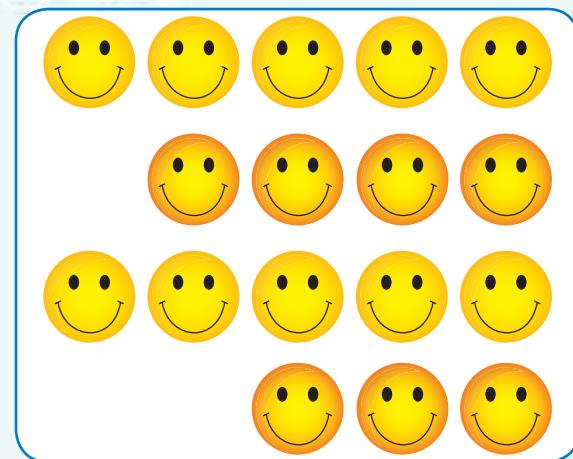
$2 + 2 + 2 + 2 + 2 + 2 + 2 =$ <input type="text" value="14"/>	<input type="text"/> <input type="text"/>
<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

5 Rekanyani zwi tevhelaho.

$2 + 2 + 2 =$ <input type="text"/>
$2 + 2 + 2 + 2 =$ <input type="text"/>
$2 + 2 + 2 + 2 + 2 =$ <input type="text"/>
$2 + 2 + 2 + 2 + 2 + 2 =$ <input type="text"/>
$2 + 2 + 2 + 2 + 2 + 2 + 2 =$ <input type="text"/>



Tangedzelani zwigwada zwa  
zwivhilizwivhili kha mutaladzi  
muñwe na muñwe.



Teacher:  
Sign:  
Date:



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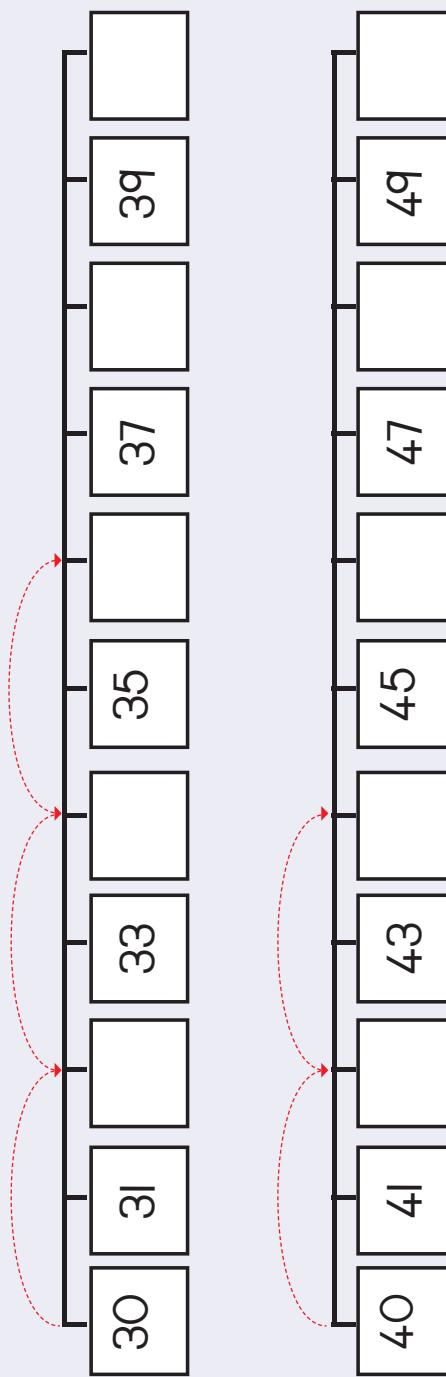


Deithi:

## Phetheni dza nomboro 2 u swika kha 50



Gerani nomboro dzi no khou ṭahela kha Tshigeriwa 2 ni dzi vhee kha mutalombalo. Ni ite na u fhedzisa dzihupu.



Fhedzisani phetheni nga u khalara nomboro dzone.

31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50



Olani dzihupu ni tshi sumbedza zwi tevhelaho:

30, 32, 34

28 30 32 34 36 38

40, 42, 44

38 40 42 44 46 48

46, 48, 50

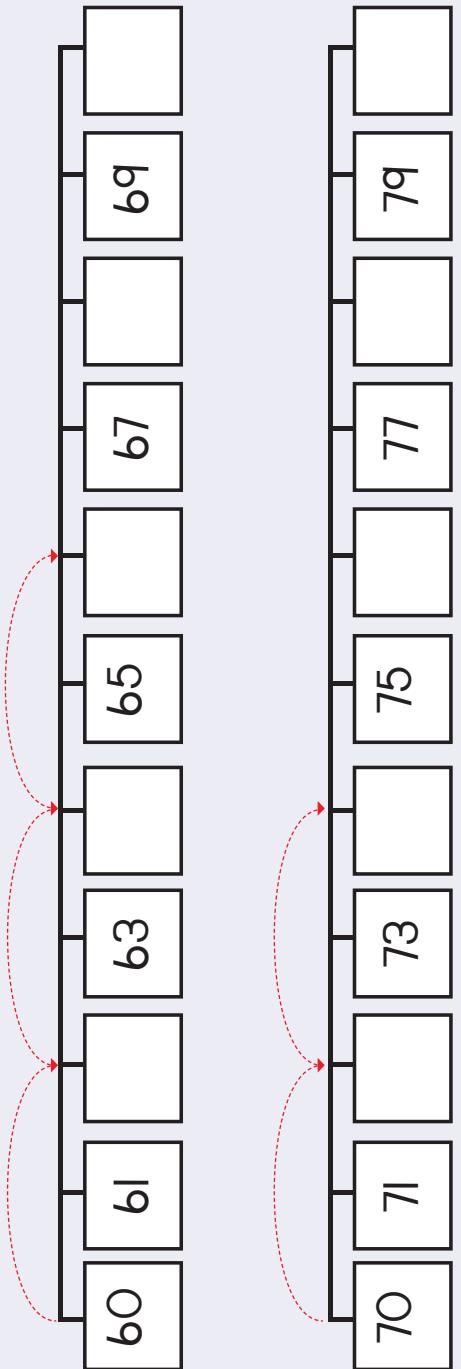
40 42 44 46 48 50

Themo ya 3





Gerani nomboro dzi no khou t̄ahela kha Tshigeriwa 2 ni dzi vhee kha mutalombalo. Ni ite na u fhedzisa dzihupu.



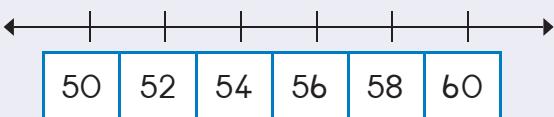
Fhedzisani phetheni nga u khalara nomboro dzone.

61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

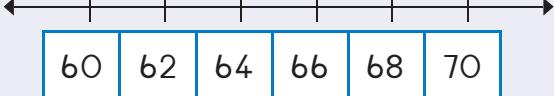


Olani dzihupu ni tshi sumbedza zwi tevhelaho:

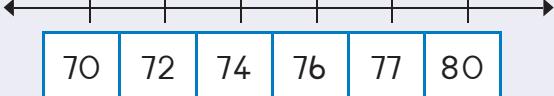
54, 56, 58

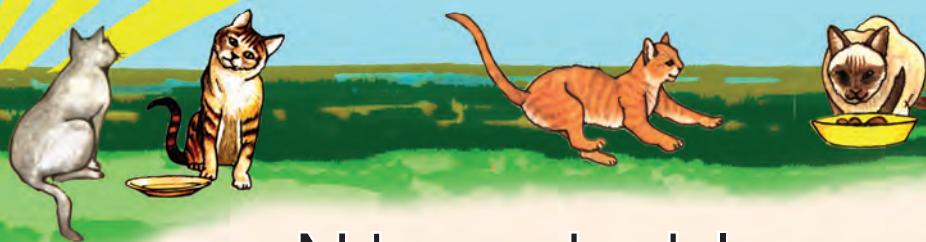


64, 66, 68



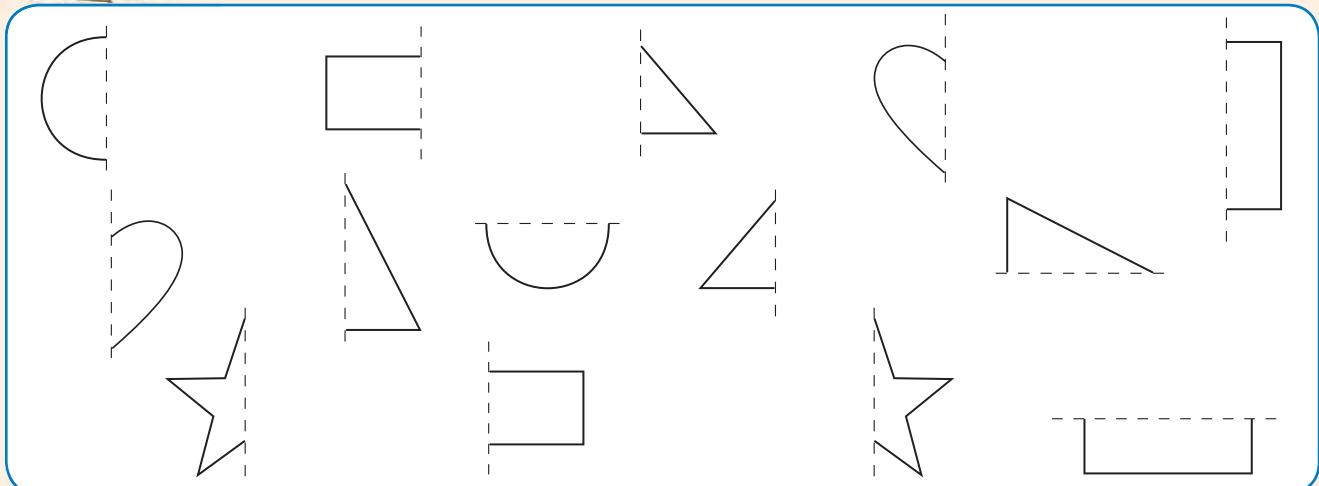
72, 74, 76



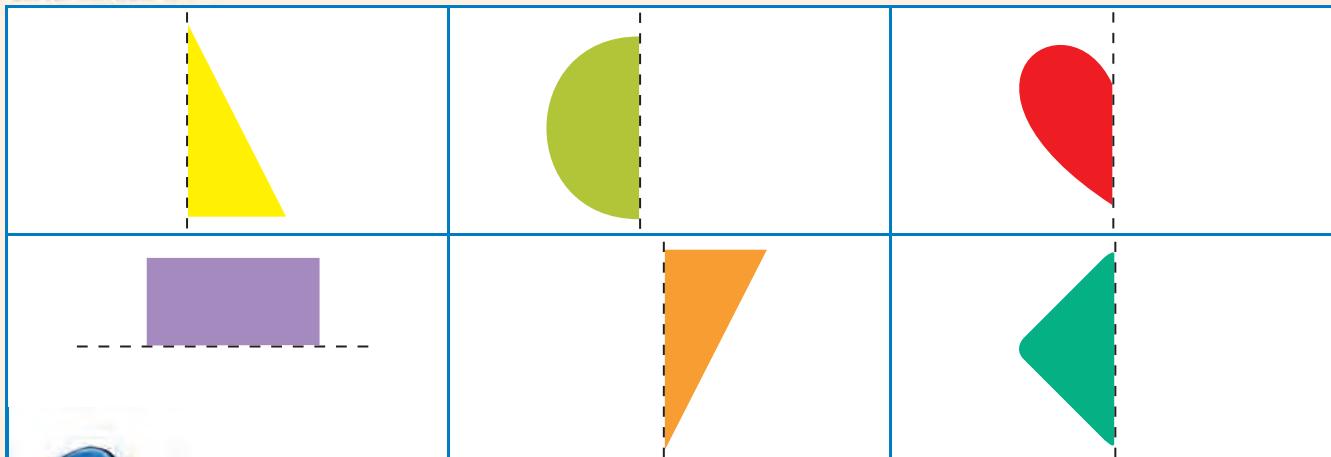


Khalaranı zwipida zwivhili zwa zwivhumbeo zwine zwa do vhumba tshivhumbeo tshithihi.

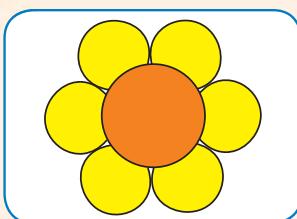
## Ndinganahuvhili



Olanı ila iñwe hafu ni i khalare.

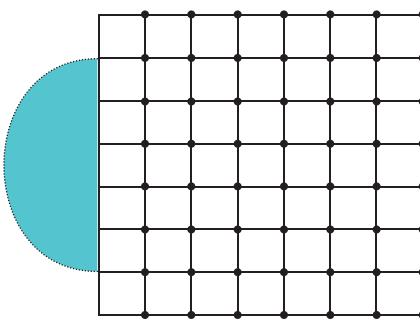
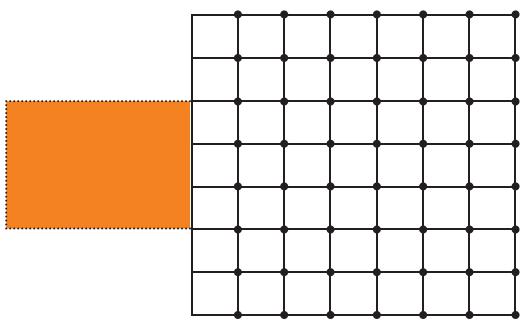
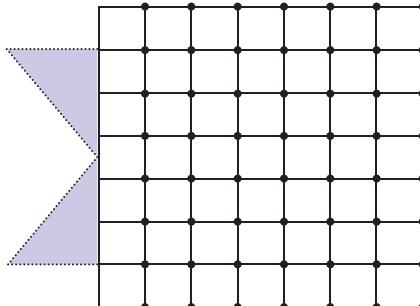
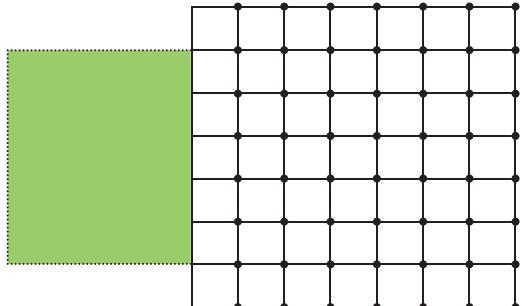
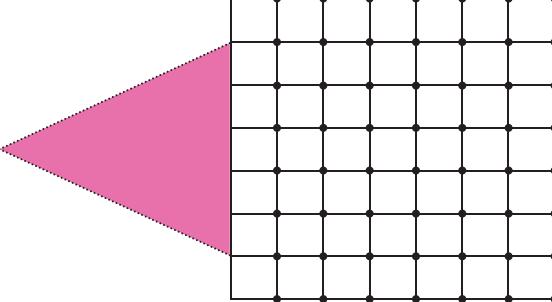
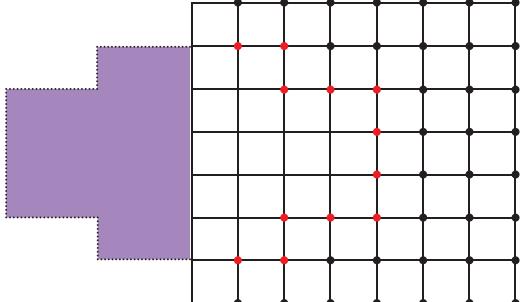


Talani mutalo u no fhandula zwifanyiso izwi zwa bva hafu mbili dici no lingana kwakwakwa.

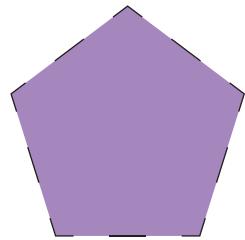
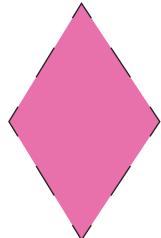
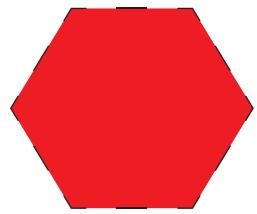




Olani ila inwe hafu ya tshivhumbeo ni tshi shumisa bodo ya giridi uri i ni dededze.



Talani mutalo u no fhandula zwivhumbeo izwi zwa bva hafu mbili dzi no lingana kokotolo.



Teacher:
Sign:
Date:



11

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95



Deithi:

## Momboro na vhuimo ha nomboro

Themo ya 3

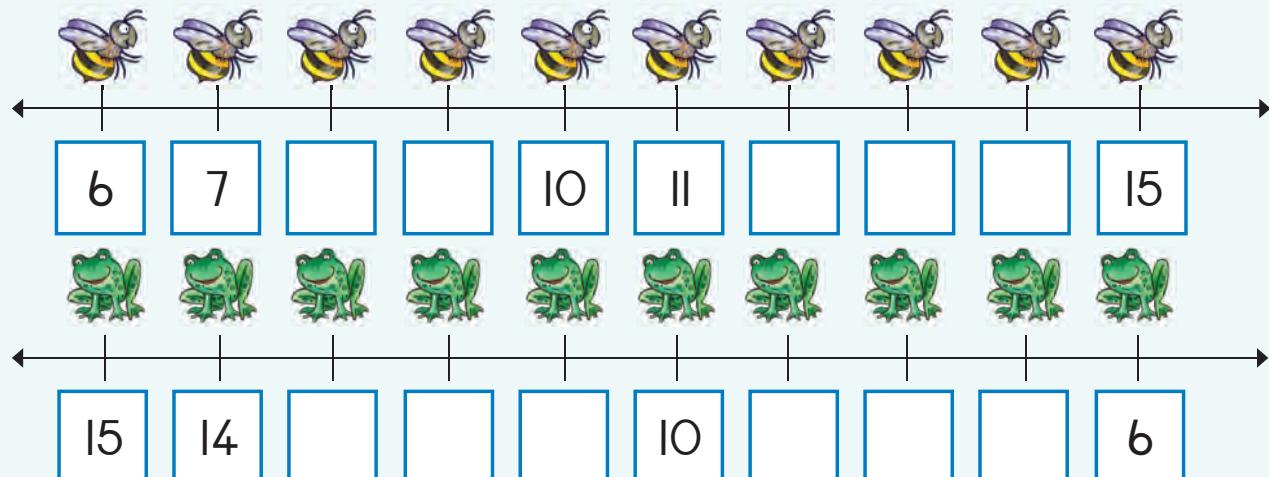


Nwalani nomboro dzi no khou ṭahela.

10	II	<input type="text"/>	<input type="text"/>	<input type="text"/>	15
q	10	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



Nwalani nomboro dzi no khou ṭahela.



Nwalani phindulo.



$10 + 1 =$	II
$10 + 2 =$	<input type="text"/>
$10 + 5 =$	<input type="text"/>
$10 + 3 =$	<input type="text"/>

$15 - 10 =$	<input type="text"/>
$14 - 10 =$	<input type="text"/>
$12 - 10 =$	<input type="text"/>
$11 - 10 =$	<input type="text"/>



62



Rekanyani mbalo iñwe na iñwe ya mivhala ni khalare tshipida tsha phazili (khanganyisa) tshi re na nomboro yone.  
Shumisani muvhala muthihi. Ro dzula ro ni itela ya u thoma.



10 + 1 nga mutswuku



10 + 3 nga pinki



10 + 5 nga wa lutombo



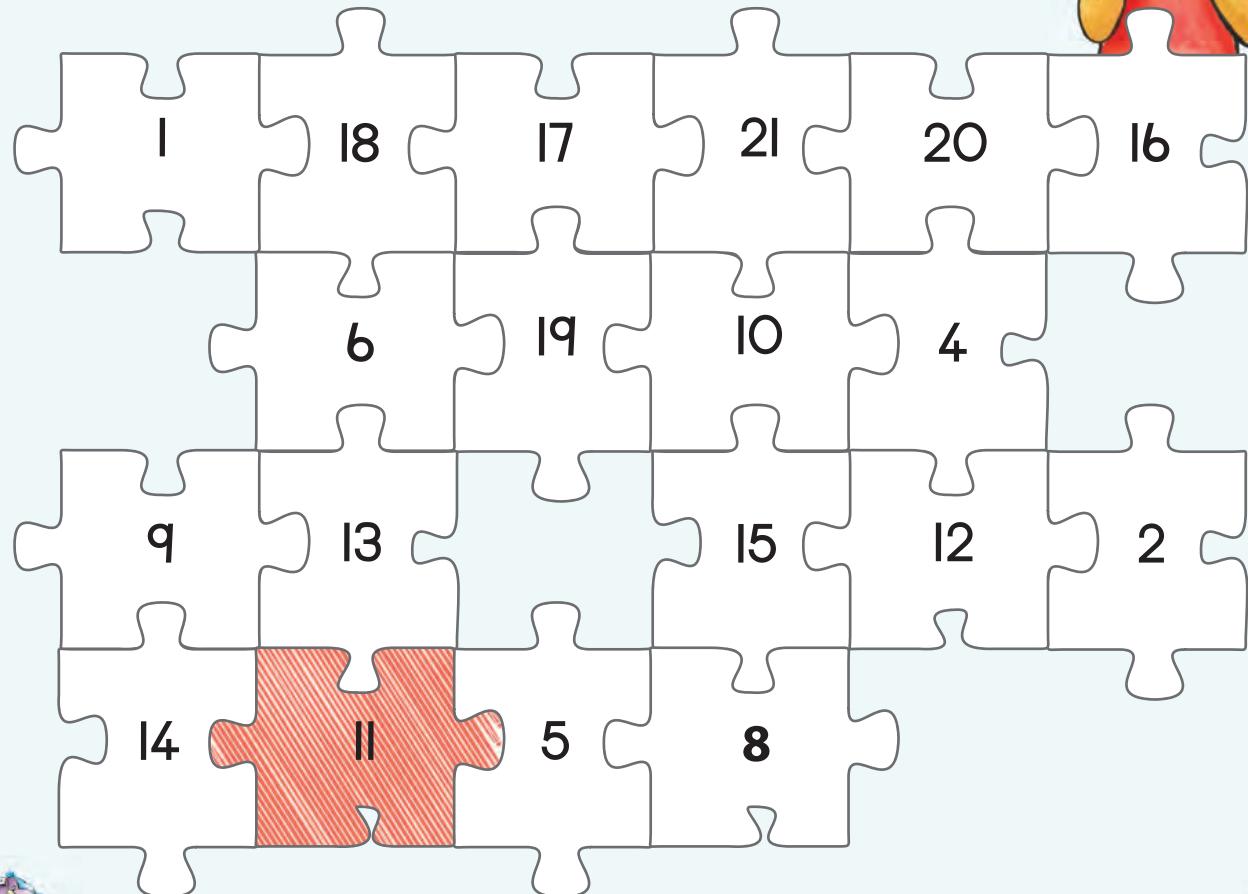
10 + 4 nga mutada



10 + 0 nga mudala



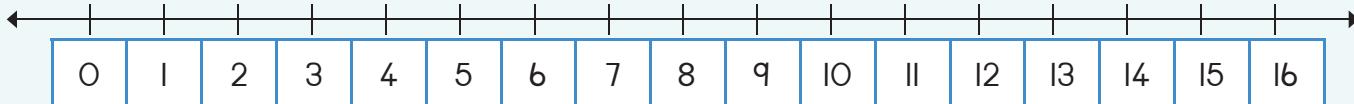
10 + 2 nga wa tshitopana



Sumbedzani fumi na iña kha mutalombalo:

Teacher:  
Sign:

Date:



11

12

13

14

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16

17

18

19

20





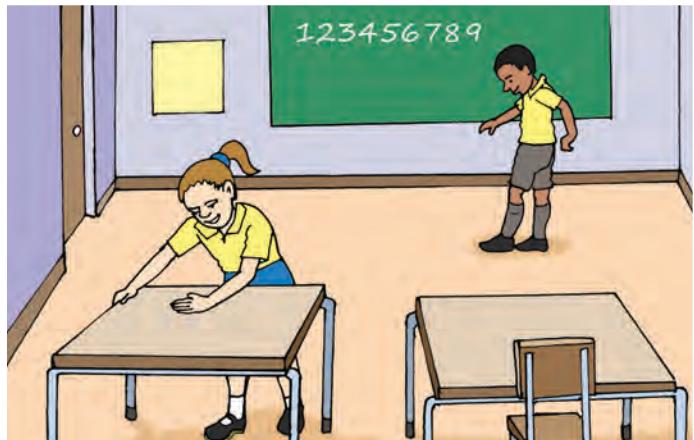
## Vhulapfu (Vhunavha)

Themo ya 3



Elani vhulapfu (vhunavha) na vhuphara ha desike kana ṭafula ni tshi shumisa vhulapfu ha tshanda tshanu. Ndi vhulapfu ha zwanda vhungana hu no linga vhulapfu ha ṭafula?

Ndi vhulapfu ha zwanda vhungana hu no linga vhuphara?



Vhulapfu vhu lingana vhulapfu ha tshanda ha \_\_\_\_\_.

Vhuphara vhu lingana vhulapfu ha tshanda ha \_\_\_\_\_.



Ndi maga mangana a no ela vhulapfu ha matungo?

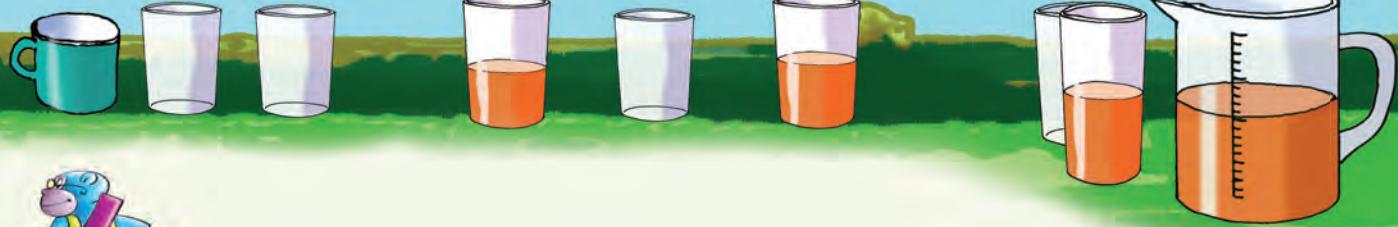


Nwalani phindulo.

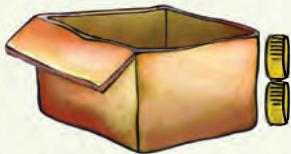


Vhulapfu vhu lingana vhulapfu ha tshanda ha \_\_\_\_\_.





Vhulapfu na vhuphara ha bogisi ili ndi vhufhio?



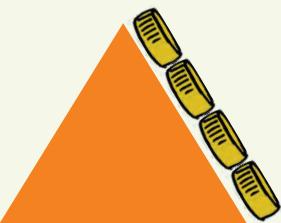
Vhulapfu ha hone vhu lingana vhulapfu  
ha zwithivho zwa babodelo zwa \_\_\_\_\_.

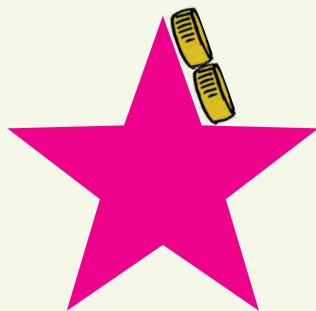
Vhuphara ha hone vhu lingana vhulapfu  
ha zwithivho zwa babodelo zwa \_\_\_\_\_.

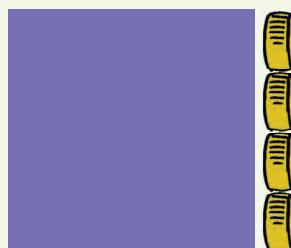


Ndi zwithivho zwingana zwi no ela vhulapfu ha matungo.



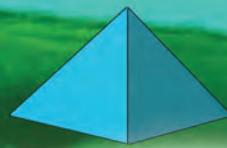
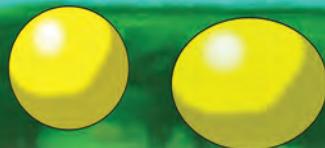
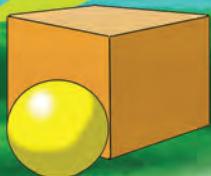








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Themo ya 4

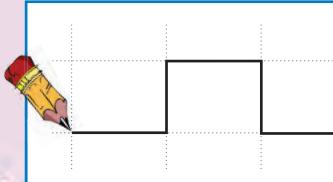
## Nomboro 16

Mvusuludzo:

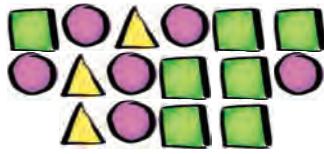
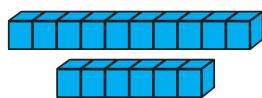
Itani ndowendowe ya u ñwala dzinambalo ni fhedzise phetheni.

7

sumbe



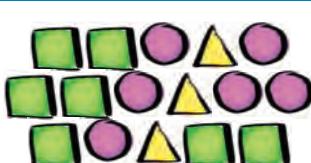
Livhanyani zwifanyiso.



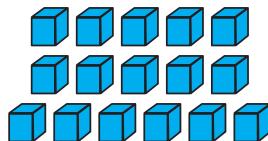
10

6

16



16



10  
6



Tovhedzelani nomboro.

16 16 16 16

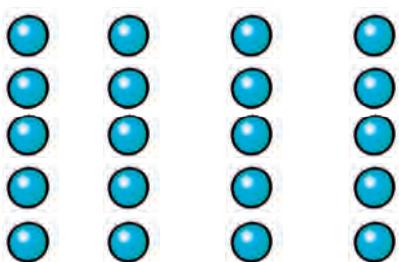
fumirathi

16 16 16 16

fumirathi



Tangedzelani mimbete  
ya 16 fhedzi.



Ho sala vhungana? \_\_\_\_\_



0

1

2

3

4

5

6

7

8

9

10



Zwino zwi oleni  
nga ndila iñwevho.



Nwalani nomboro i no  
khou tñahela.

2	3	4
19		21
17		19



Fhedzisani thebulu. Rou iñwe na iñwe i na  
tshifanyiso, nomboro na ipfi lo imelaho nomboro iyo.



Ndi nomboro ifhio i re tñukhu  
kha 16 nga thihi? \_\_\_\_\_  
Ndi nomboro ifhio i re khulwane  
kha 16 nga thihi? \_\_\_\_\_

	16	
		fumirathi



Ndi nomboro ifhio i re tñukhu kha fumirathi nga thihi?

Ndi nomboro ifhio i re tñukhu kha fumirathi nga mbili?

Ndi nomboro ifhio i re khulwane kha fumirathi nga thihi?

Ndi nomboro ifhio i re khulwane kha fumirathi nga mbili?

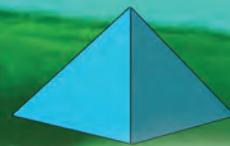
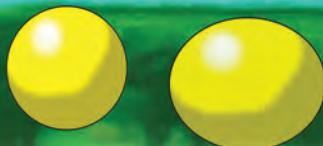
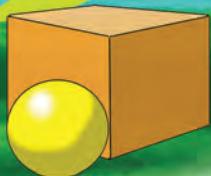


Nwalani nomboro dzi no khou tñahela.

10	9		7	6		4	3		1



98



## Nomboro 17

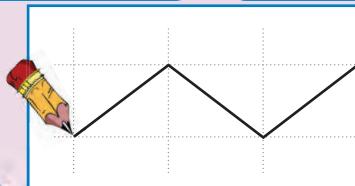
Themo ya 4

Mvusuludzo:

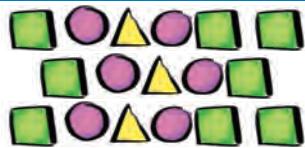
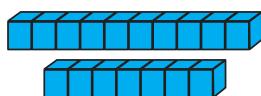
Itani ndowendowe ya u riwala dzinambalo ni fhedzise phetheni.

8

malo



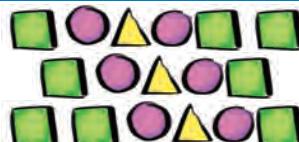
Livhanyani zwifanyiso.



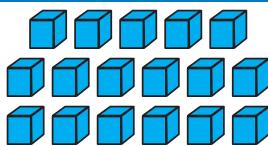
10

7

17



17

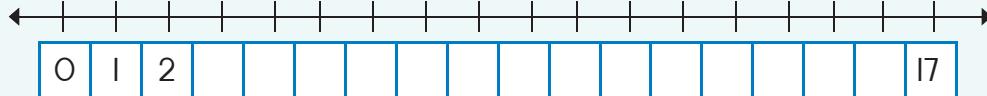


10

7



Fhedzisani mutalombalo.



Olani zwithu zwa 17.

Zwino zwi oleni  
nga ndila iñwevho.



Ndi nomboro ifhio  
i no tevhela?

16	17	
24	25	
17	18	



Fhedzisani thebulu.  
Rou iñwe na iñwe  
i na tshifanyiso,  
nomboro na ipfi lo  
imelaho nomboro  
iyo.

	17	
		fumisumbe



Ndi nomboro ifhio i re ḫukhu kha fumisumbe nga thihi?

Ndi nomboro ifhio i re ḫukhu kha fumisumbe nga mbili?

Ndi nomboro ifhio i re khulwane kha fumisumbe nga thihi?

Ndi nomboro ifhio i re khulwane kha fumisumbe nga mbili?



Nwalani nomboro dzi no khou ṫahela.

Nwalani nomboro dzi no khou ṫahela.

	2		4		6		8		10
	12		14		16		18		20

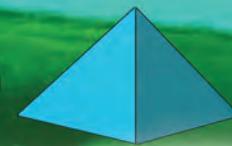
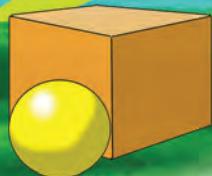


Teacher:  
Sign:

Date:



qq



Themo ya 4

## Nomboro 18

Mvusuludzo:

Itani ndowendowe ya u riwala dzinambalo ni fhedzise phetheni.

q

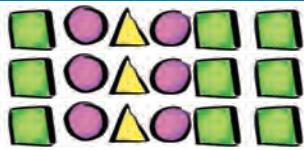
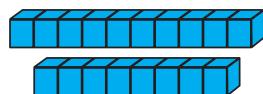
tahē



Livhanyani zwifanyiso.



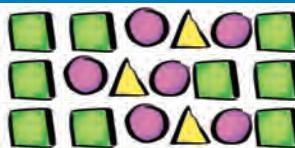
Tovhedzelani nomboro.



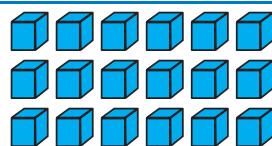
10

8

18



18



10

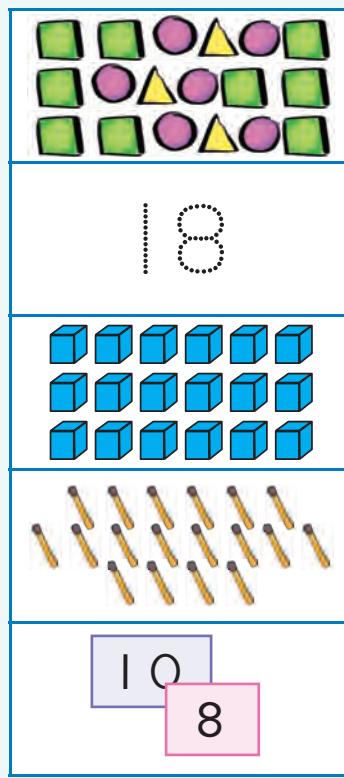
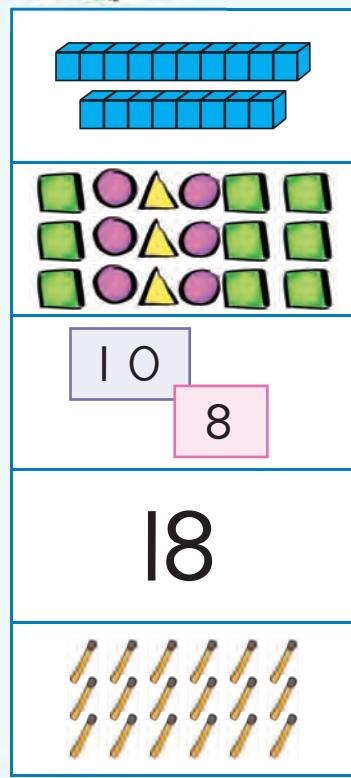
8

18 18 18 18

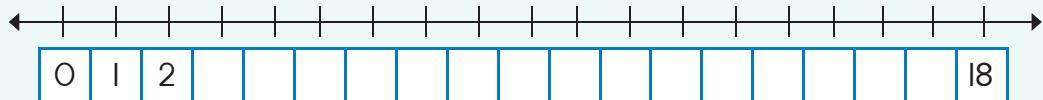
fumimalo

18 18 18 18

fumimalo



Fhedzisani mutualombalo.



70

0

1

2

3

4

5

6

7

8

9

10



Olani zwithu zwa 18.

Zwino zwi oleni  
nga ndila iñwevho.



Ndi nomboro ifhio i no  
tevhela?

8	q	
33	34	
0	I	



Fhedzisani thebulu.  
Rou iñwe na iñwe  
i na tshifanyiso,  
nomboro na ipfi lo  
imelaho nomboro  
iyo.

	18	
		fumimalo



Ndi nomboro ifhio i re t̄hukhu kha 18 nga thihi?

Ndi nomboro ifhio i re t̄hukhu kha 18 nga mbili?

Ndi nomboro ifhio i re khulwane kha 18 nga thihi?

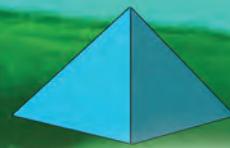
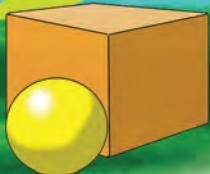
Ndi nomboro ifhio i re khulwane kha 18 nga mbili?



Nwalani nomboro i no khou t̄ahela.

I	2		4	5	6	7		q	10
II		I3	I4	I5		I7	I8		20

100



## Nomboro 19

Themo ya 4

Mvusuludzo:

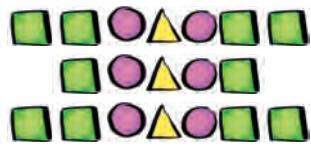
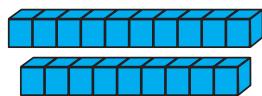
Itani ndowendowe ya u ñwala dzinambalo ni fhedzise phetheni.

10

fumi



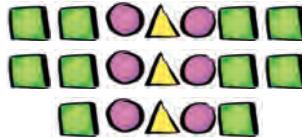
Livhanyani zwifanyiso.



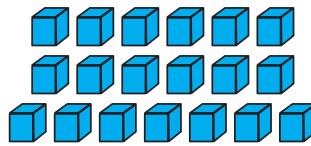
10

q

19



19



10  
q



Tovhedzelani nomboro.

19 19 19 19

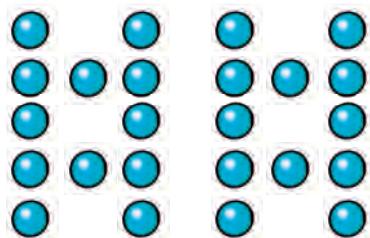
fumi q ahe

19 19 19 19

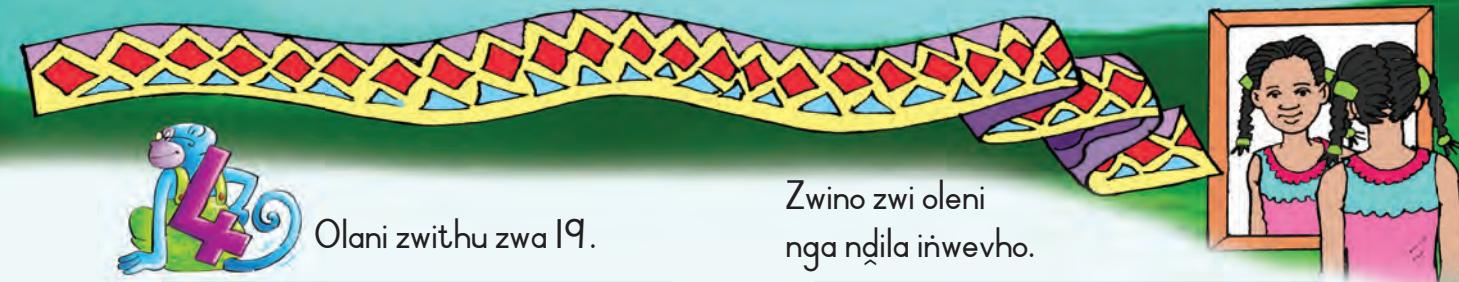
fumi q ahe



Tangedzelani vhulungu ha 19 fhedzi.



Ho sala vhungana? \_\_\_\_\_



Olani zwithu zwa 19.

Zwino zwi oleni  
nga ndila iñwevho.



Ndi nomboro ifhio i  
no da vhukati?

14		16
35		37
8		10



Fhedzisani thebulu. Rou iñwe na iñwe i na tshifanyiso, nomboro na ipfi lo  
imelaho nomboro iyo.

	19	
		fumičahē



Ndi nomboro ifhio i re ḥukhu kha 19 nga thihi?

Ndi nomboro ifhio i re ḥukhu kha 19 nga mbili?

Ndi nomboro ifhio i re khulwane kha 19 nga thihi?

Ndi nomboro ifhio i re khulwane kha 19 nga mbili?



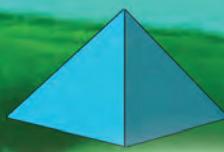
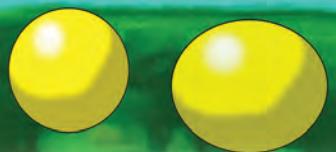
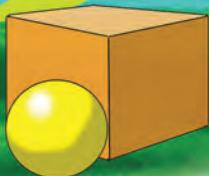
Nwalani nomboro i no khou ṭahela.

Liñwe dzina ḥadzo ndi  
nomboro dza ivini.

I		3		5		7		9	
II		13		15		17		19	



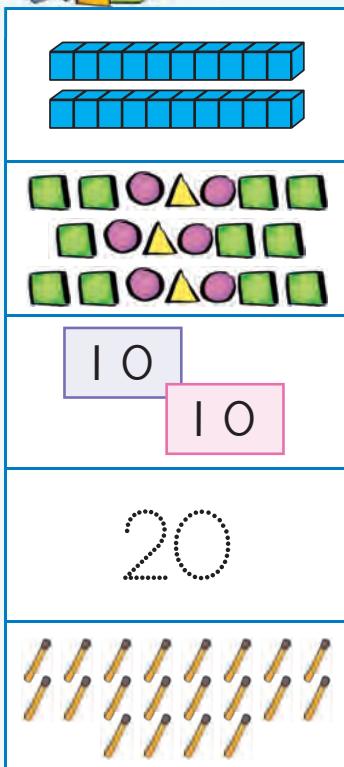
101



Themo ya 4



Livhanyani zwifanyiso.



Tangedzelani vhulungu ha 20 fhedzi.



Fhedzisani thebulu. Rou (muduba) iñwe na iñwe i na tshifanyiso, nomboro na ipfi lo imelaho nomboro iyo.

		fumbili
		fumbili



Ndi nomboro ifhio i re thukhu kha 20 nga thihi? \_\_\_\_\_

Ndi nomboro ifhio i re khulwane kha 20 nga thihi? \_\_\_\_\_





Tumani  
nomboro na  
ipfī.

0
1
2
3
4
5
6
7
8
q
10
II
I2
I3
I4

iña
sumbe
tahe
raru
fumithihi
fumimbili
thihi
mbili
malo
zero
thanu
rathi
fumiraru
fumi
fumiña



Nwalani nomboro i no khou  
tahele.

Rangela	Tevhela
I6	I7
	I2
	I4
q	10
b	



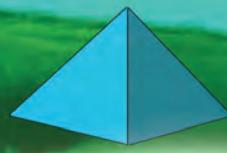
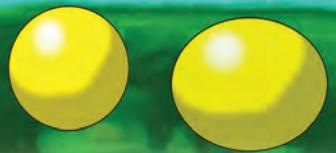
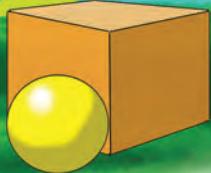
Shumisani maipfi a tħukku na  
khulwane ni tshi fħedzisa hezwi:

35 ndi \_\_\_\_\_ kha 38

79 ndi \_\_\_\_\_ kha 65



102



## Mutanganyo

Themo ya 4



Tangedzelani nomboro i re khulwane tshibulokoni tshiñwe na tshiñwe.

3	5	15	11	20	8
8	7	12	6	17	18



Tanganyani zwi tehelaho.  
Thomani nga u dzenisa  
nomboro khulwane u  
thoma.

$1 + 1 + 5 =$	$5 + 1 + 1 =$
$6 + 2 + 10 =$	
$3 + 4 + 2 =$	
$2 + 6 + 3 =$	
$1 + 10 + 2 =$	



Tanganyani zwibuloko.

 $10 + 2 + 3 = 15$	 $\quad$	 $\quad$
$10 + 5 = 15$		



Nwalani fhungombalo la zwi tehelaho.

 $\quad$	 $\quad$	 $\quad$

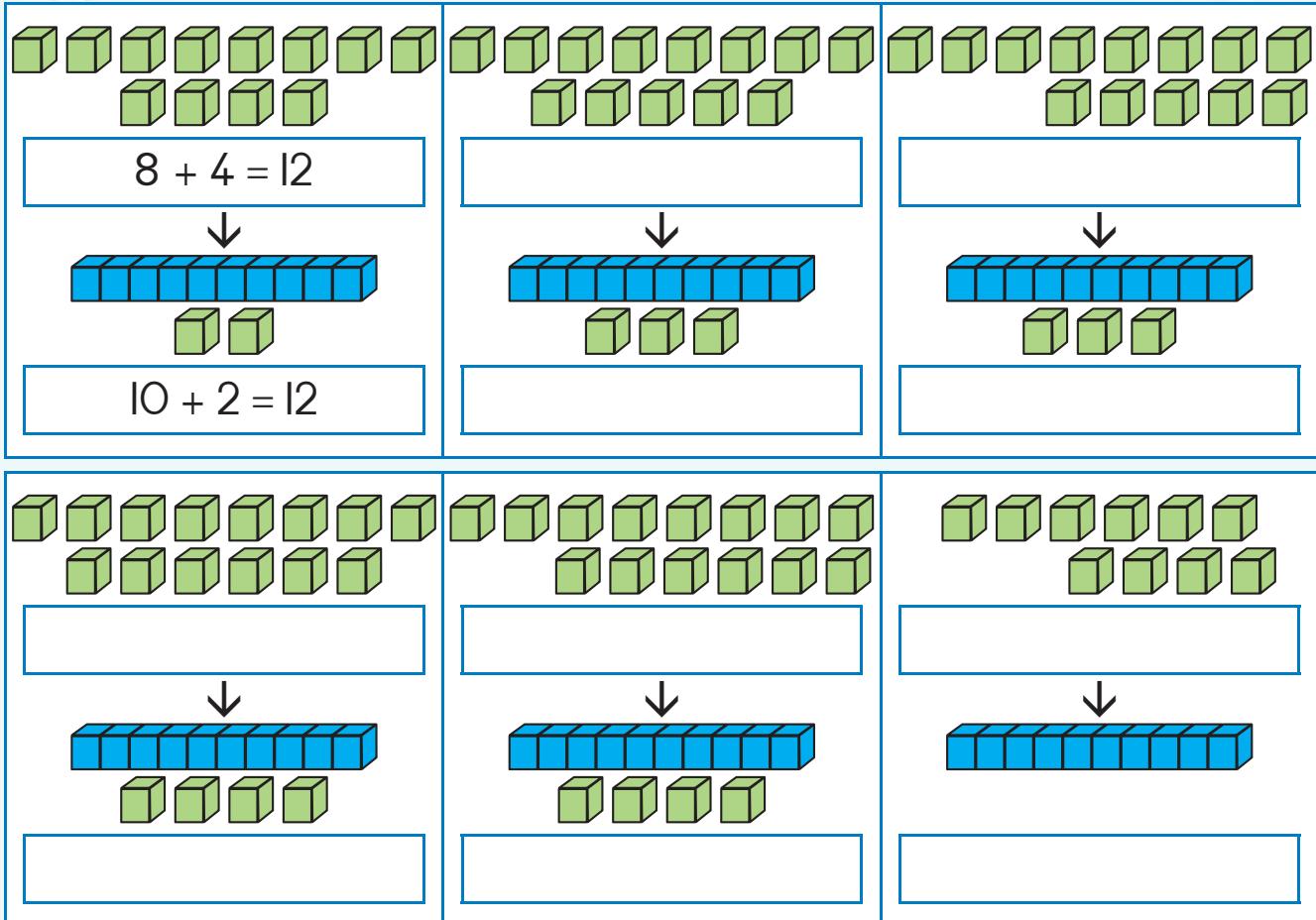


76



5

Nwalani fhungombalo la zwi tevhelaho:



Nwalani nomboro dzi no khou t̄ahela.

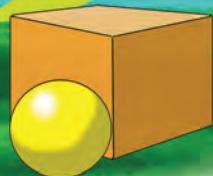
	+	14	=	17
9	+		=	20
12	+	8	=	
15	+		=	20
	+	6	=	13
14	+	3	=	0



Teacher:  
Sign:  
Date:



103

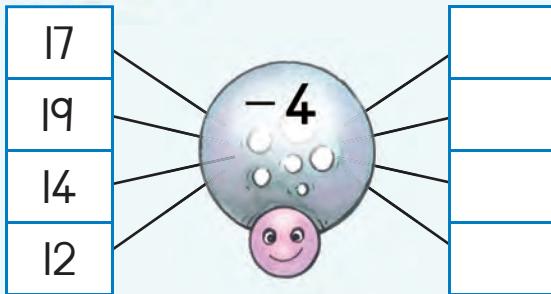


Themo ya 4

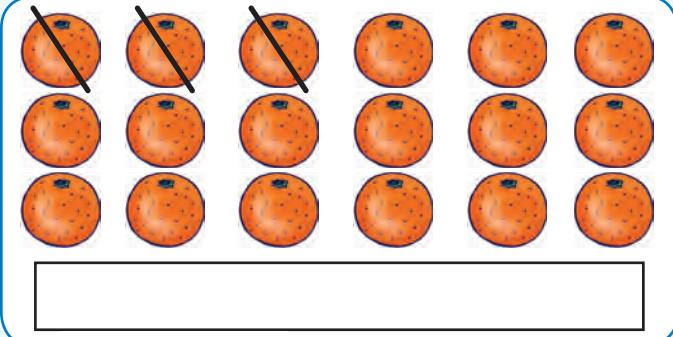
## Mutuso



Rekanyani.



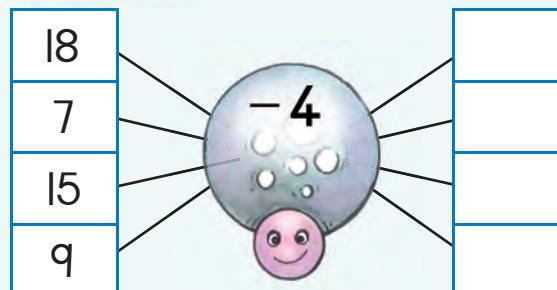
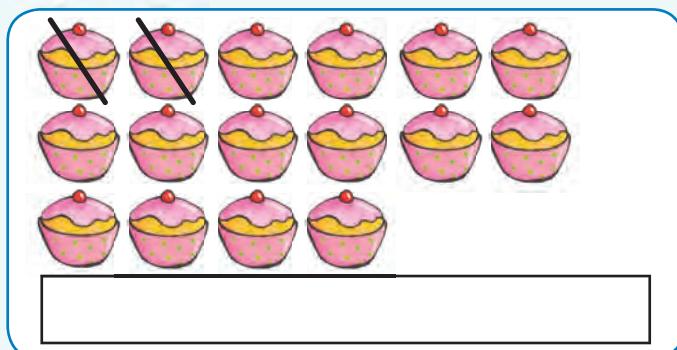
Nwalani fhungombalo.



Nwalani fhungombalo.



Rekanyani.



Fhedzisani mbalo ni tshi shumisa nyolo (zwifanyiso).



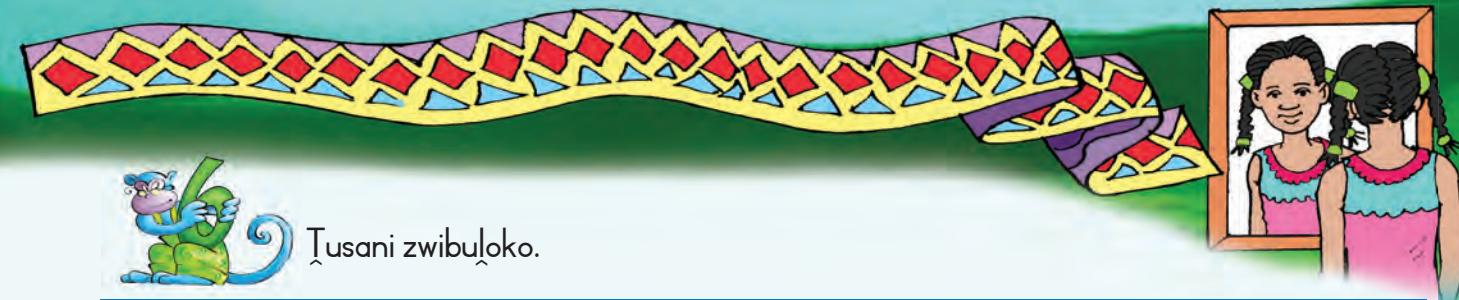
$$16 - \boxed{\quad} = \boxed{\quad}$$



$$10 + \boxed{\quad} = \boxed{\quad}$$



78



Tusani zwibuloko.

$(10 + 3) - 2 =$		
$13 - 2 =$		



Rekanyani zwi tevhelaho.

$11 + 7 = \boxed{\phantom{00}}$	$11 + 7 = \boxed{\phantom{00}}$
$11 + 4 + \boxed{\phantom{00}} = \boxed{\phantom{00}}$	$11 + 5 + \boxed{\phantom{00}} = \boxed{\phantom{00}}$
$19 - 7 = \boxed{\phantom{00}}$	$17 - 9 = \boxed{\phantom{00}}$
$19 - (5 + \boxed{\phantom{00}}) = \boxed{\phantom{00}}$	$17 - (7 + \boxed{\phantom{00}}) = \boxed{\phantom{00}}$



Rekanyani zwi tevhelaho.

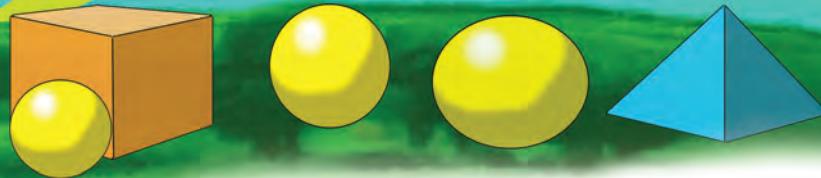
Nyingakavhili ya 5 ndi <input type="text"/>	Nyingakavhili ya 3 ndi <input type="text"/>	Nyingakavhili ya 4 ndi <input type="text"/>
Nyingakavhili ya 7 ndi <input type="text"/>	Nyingakavhili ya 2 ndi <input type="text"/>	Nyingakavhili ya 8 ndi <input type="text"/>
Nyingakavhili ya 10 ndi <input type="text"/>	Nyingakavhili ya 9 ndi <input type="text"/>	Nyingakavhili ya 1 ndi <input type="text"/>



Findulani zwi tevhelaho:

$9 + 9 - 1 =$	<input type="text"/>	kana	$Ho ingwa kavhili 9 - 1 =$	<input type="text"/>
	<input type="text"/>	kana	$Ho ingwa kavhili 5 - 1 =$	<input type="text"/>
$4 + 4 - 1 =$	<input type="text"/>	kana		





## Mutanganyo na mutuso



Vhalani uri ho dzula zwimange zwingana duvhani.

Vhusiku zwiñwe zwazwo zwi edela nga murahu ha luvhondo.

Wanani tshivhalo tsha zwimange zwi re murahu ha luvhondo ni tshi ñwale.

$3 + \square = 8$

$4 + \square = 8$



Tandululani zwi tevhelaho.

Ni nga kha ñi ita nyolo uri i ni thuse.



Lerato o vha e na maswiri a 4. Peter a mu fha maswiri a 13.

Unna maswiri mangana zwino?

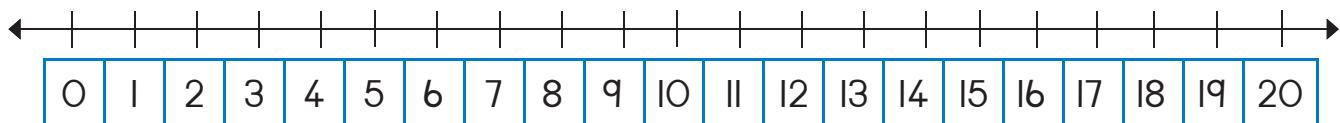
Mandla u na khirayoni dza 5. Anne u na khirayoni dza 8.  
Ndi nnyi a re na kharayoni ñukhu?



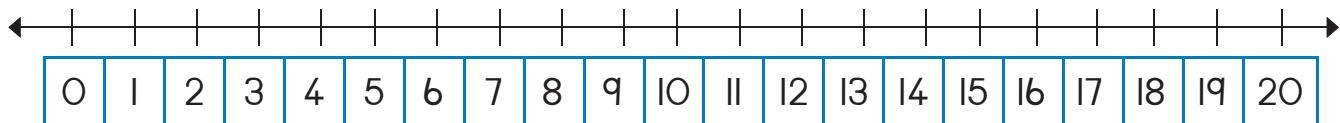


Shumisani mutualombalo kha u tandulula zwi tevhelaho:

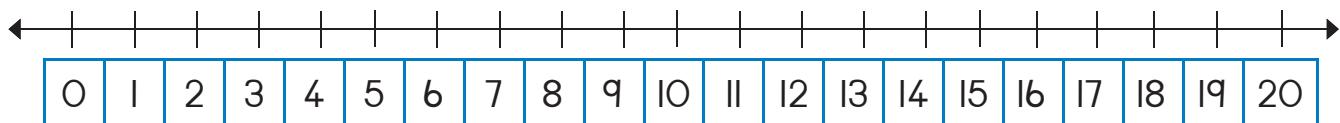
Thandi u na mimavhu<sub>lu</sub> midala ya **6** na ya lutombo **9**.  
U na mimavhu<sub>lu</sub> mingana?



Lerato u na mimavhu<sub>lu</sub> ya **16**. Ya malo ndi midala ngeno minwe yo<sub>the</sub> i ya lutombo. Lerato u na mimavhu<sub>lu</sub> mingana ya lutombo?



Thandi u na miomva ya **19**. Themba u na miomva ya **10**.  
Thandi u na miomva minzhi nga mingana u fhira Themba?



Ndi nomboro dzifhio dzi no wanala  
vhukati ha **25** na **30**?

Tangedzelani nomboro i re khulwane  
kha **76** nga 1.

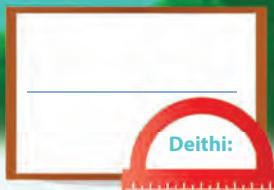
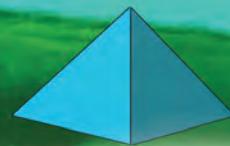
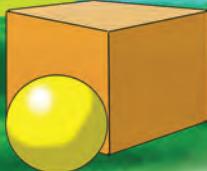
74	75	76	77	78
----	----	----	----	----



Tangedzelani nomboro i re khulwane  
kha **76** nga 2.

74	75	76	77	78
----	----	----	----	----





## Nomboro zwadzo

Themo ya 4



Ndi iyi we a dzhia vhuimo ha u thoma mbambeni?  
Nwalani vhuimo nga fhasi havho.

Sipho



Lerato



John



Peter



Ann



2

3



Vha oleni vho  
ima nt̄ha ha  
phodiamu.

Tset̄ha

Musuku

Buronzo

Ndi nnyi we a wana musuku? \_\_\_\_\_

Ndi nnyi we a wana tset̄ha? \_\_\_\_\_



Olani ndunzhedzo ya  
vhulungu nga heyi ndila:

Lulungu lwa u thoma ndi lwa lutombo.  
Lulungu lwa vhuvhili ndi lutswuku.  
Lulungu lwa vhuraru ndi ludala.  
Lulungu lwa vhuñā ndi lwa ḥada.  
Lulungu lwa vhuñanu ndi lwa lutombo.  
Lulungu lwa vhurathi ndi lutswuku.  
Lulungu lwa vhusumbe ndi ludala.  
Lulungu lwa vhumalo ndi lwa ḥada.  
Lulungu lwa vhuñahē ndi lwa lutombo.  
Lulungu lwa vhufumi ndi lutswuku.

Ndunzhedzo ya vhulungu hanga.





Lavhelesani thevhekano ya zwivhumbeo.  
Kopololelani zwivhumbeo zwikalani zwone kha thebulu.  
Ro dzula ro ni itela ya u thoma.



### Ndi tshivhumbeo tshifhio tshi re tsha:

Vhuna		Vhusumbe	
Vhutanu		Vhutahé	
Vhuvhili		Ufhedza	
Vhuraru		Vhurathi	



Itani zwi tevhelaho:



Khalarani tshitendeledzi tsha u thoma nga muvhala mutswuku.



Khalarani tshitendeledzi tsha vhutanu nga muvhala wa ḥada.



Khalarani tshitendeledzi tsha vhumalo nga muvhala wa lutombo.



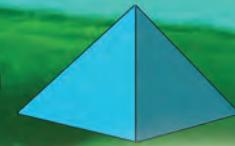
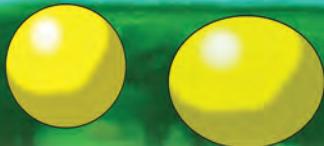
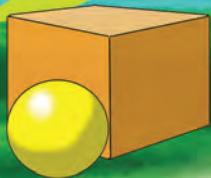
Itani mutualombalo wa 10 u swika kha 20.

Tangedzelani nomboro ya vhuraru na ya vhumalo.



Teacher:  
Sign:  
Date:

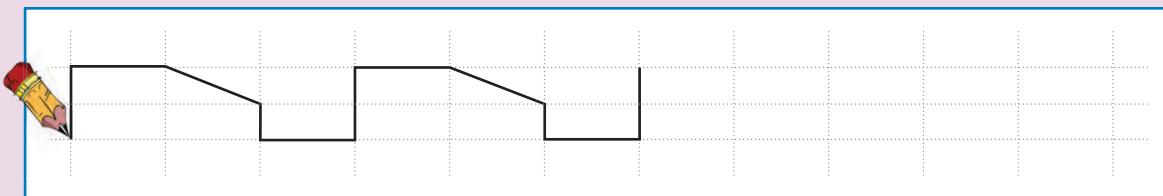




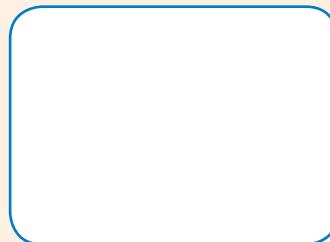
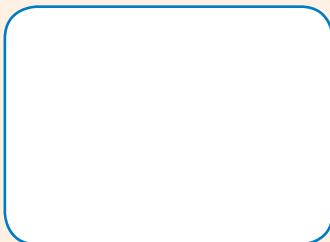
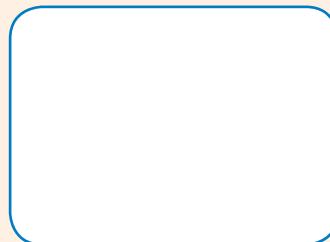
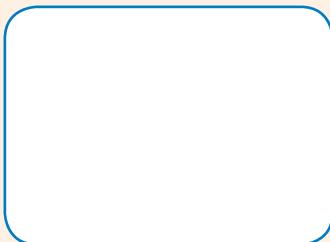
## Zwithu na zwivhumbeo

Mvusuludzo:

Mvusuludzo: Fhedzisani phetheni.



Wanani zwifanyiso zwivhili zwa bola na zwifanyiso zwivhili zwa mabogisi kha gurann̄da kana magazini ni zwi nambatedze af'ho fhasi.



Itani tshitendeledzi tsha lutombo u mona na zwithu zwot̄he zwine zwa swenda.  
Itani tshikwea tshitswuku u mona na zwithu zwot̄he zwine zwa kunguluwa.





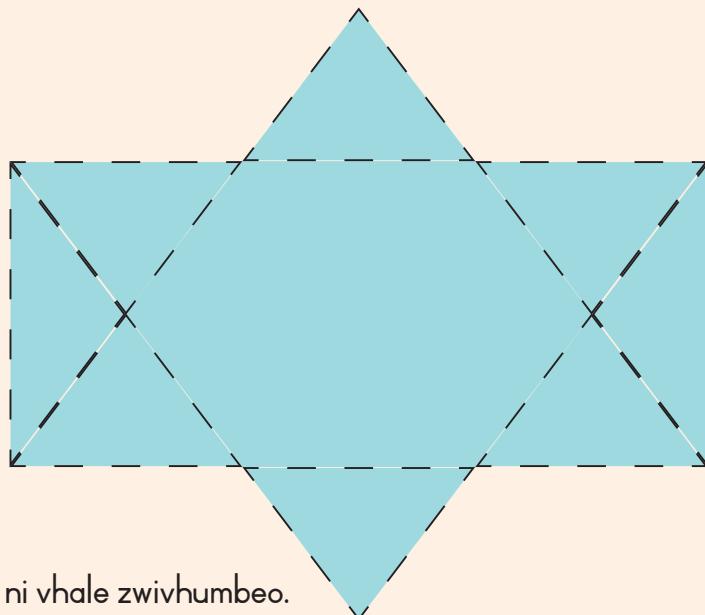
Tevhedzelani ipfi ni ole tshithu.

boqisi

bola



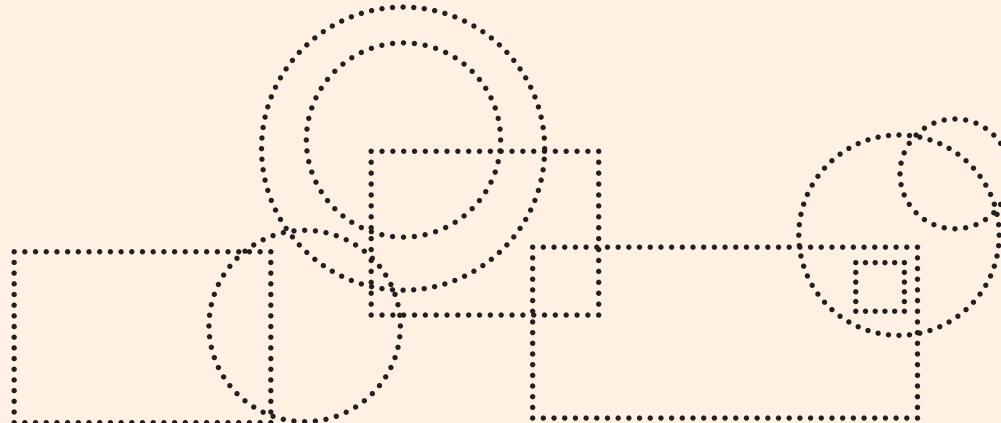
Vhalani thiraiengele dzot̄he ni nwale nomboro.



Phindulo:



Tevhedzelani ni vhale zwivhumbeo.



Zwitendeledzi

Zwikwea



11

12

13

14

15

16

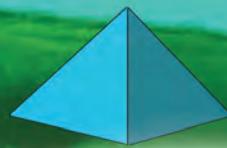
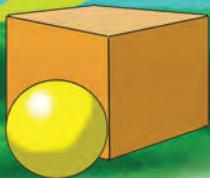
17

18

19

20

107



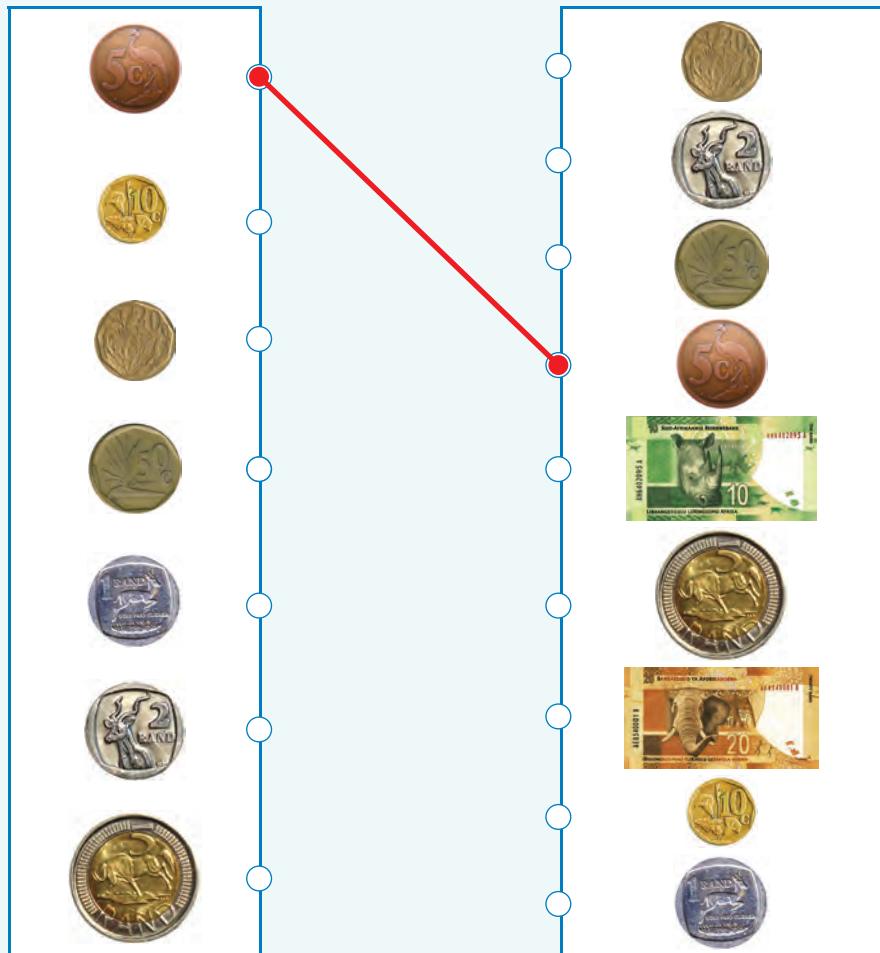
Themo ya 4



Ni nga livhanya  
khoini dzifhio?



Itani thiki tshibogisini tshirinwe na tshirinwe tsini na khoini na noutu  
(ya mabammbiri) dzine dza nga ni fha zwi tevhelaho:



<b>R10</b>	<input type="checkbox"/>								
------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

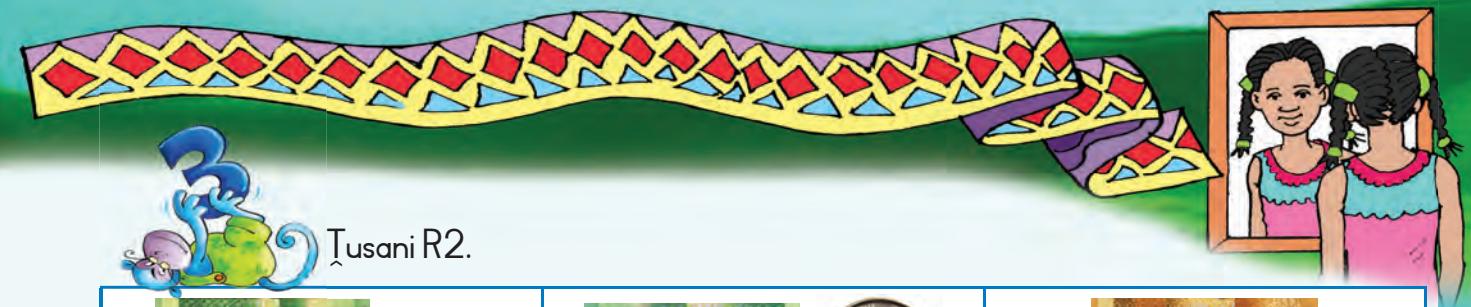
<b>R20</b>	<input type="checkbox"/>								
------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

<b>RI5</b>	<input type="checkbox"/>								
------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------



86

0 1 2 3 4 5 6 7 8 9 10



Tusani R2.

$R12 - R2 = R10$		



Tusani R5.

$R15 - R5 = R10$		



Ni nga ola t̄hangano nngana dzo fhambananaho dza u ita R20?

Ro dzula ro ni itela ya u thoma.

--	--

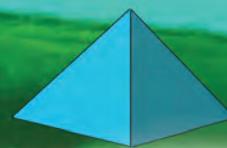
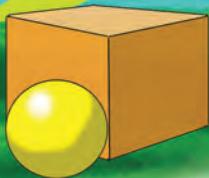


Tangedzelani khoini kha  
mutaladzi muñwe na muñwe  
ine na nga renga zwinzhi  
ngayo.



Teacher:  
Sign:  
Date:





## Tshelede iñwe hafhu

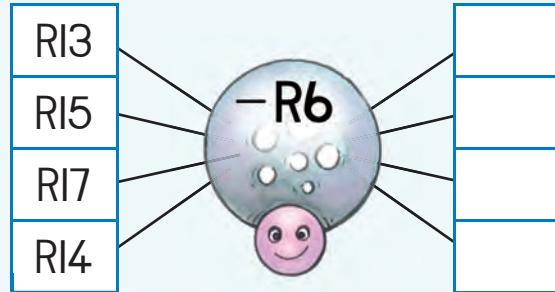
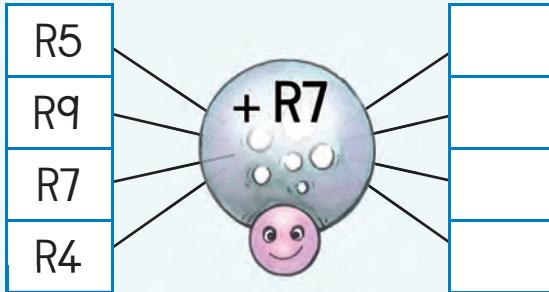
Themo ya 4



Rekanyani.



Rekanyani.



Ńwalani phindulo.



Ndi ifhio khulwane (nnzhi)?  
Tangedzelani phindulo yanu.

RIO + RI =	
RIO + R2 =	
RIO + R3 =	
RIO + R4 =	
RIO + R5 =	

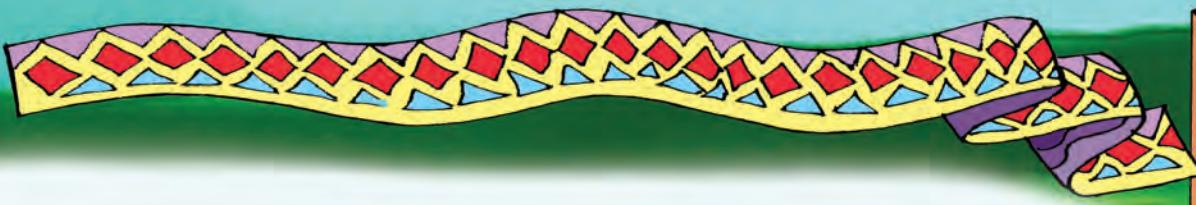
5c kana R5
20c kana R20
RI kana 50c
R2 kana RI
20c kana 50c



Tanganyani nomboro dzi tshi buda kana dzi tshi tsitsa ni ńwale phindulo.

R2	R4	R9	=
R7	R3	R5	=
R6	R8	RI	=
=	=	=	=





Lavhelesani tsumbo ni  
fhedzise dzo salaho.



James o renga vhurotho nga  
R8. A badela nga noutu ya RIO (ya  
bammbiri). O wana tshintshi ya vhugai?

RI7	=	RIO	+	R7
RI6	=		+	
RI5	=		+	
RI4	=		+	
RI3	=		+	
RI2	=		+	



Mme a Busi vho renga muñadzi  
wa RI7. Vha badela nga no noutu  
mbili utu dza RIO. Vho wana  
tshintshi ya vhugai?



Duvha  $\frac{1}{2}$  mabebo  $\frac{1}{2}$  Judy  $\frac{1}{2}$  vha  
nga Swondaha. O fhiwa R5 nga  
mukomama wawe, a fhiwa R2 nga  
khaladzi awe na RIO nga muzwala  
wawe. Vha na malegere mangana o  
tangana othe?

Mbudziso i ri mini?

---



---

Nwalani nomboro.

---

Nwalani mbalo ni i shume.

---

Mbudziso i ri mini?

---



---

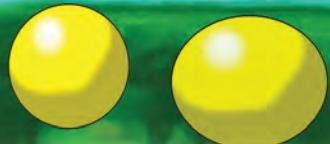
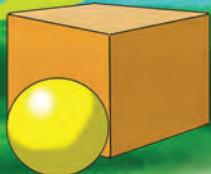
Nwalani nomboro.

---

Nwalani mbalo ni i shume.



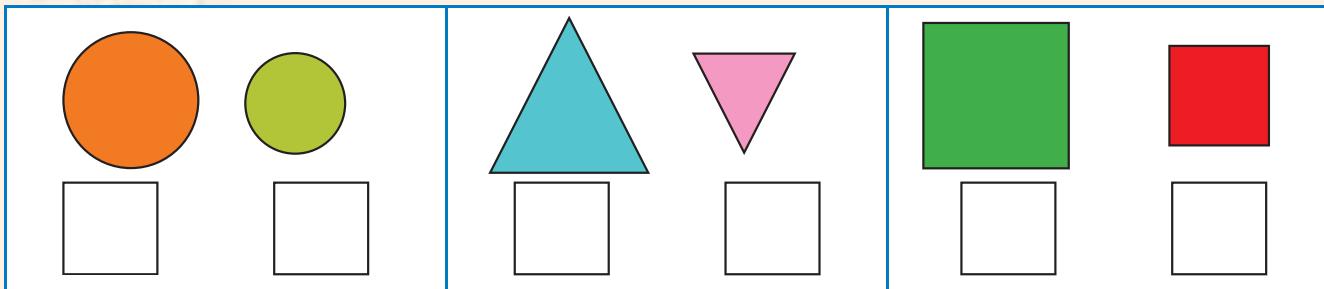
109



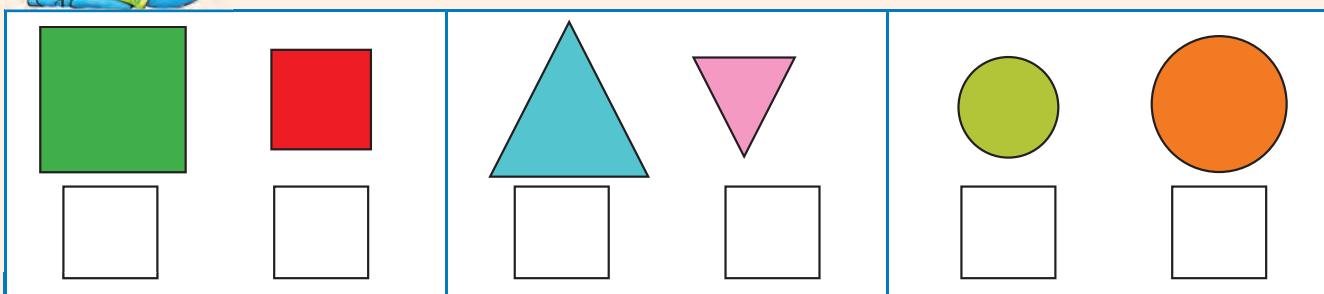
Themo ya 4



Itani thiki kha tshivhumbeo tshitukusa tshibulokoni tshiñwe na tshiñwe.

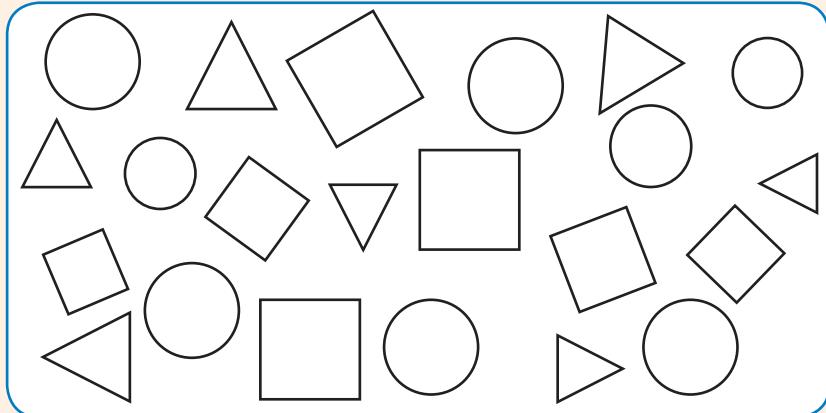


Itani thiki kha tshivhumbeo tshihulwanesa tshibulokoni tshiñwe na tshiñwe.

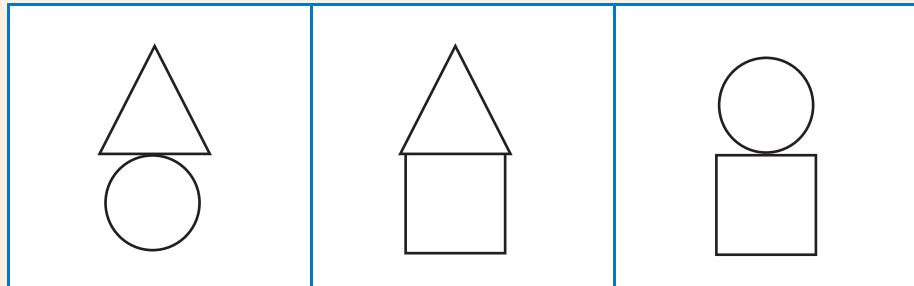


Khalaraní:

- zwikwea nga muvhala wa lutombo
- thiraiengele nga muvhala mutswuku
- zwitendeledzi nga muvhala mudala



Itani tshifanyiso ni tshi shumisa zwivhumbeo. Ro thoma tshifanyiso tshiñwe na tshiñwe nga zwivhumbeo zwivhili.



90

0

1

2

3

4

5

6

7

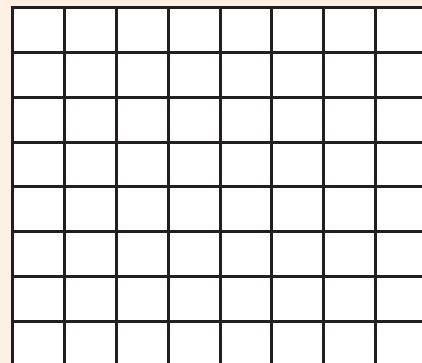
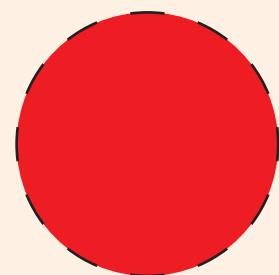
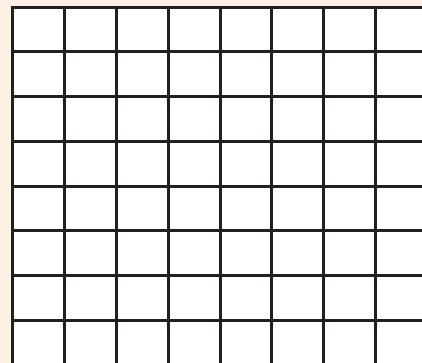
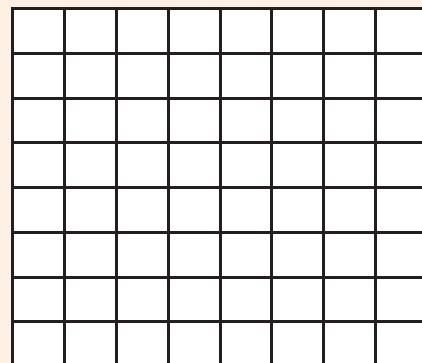
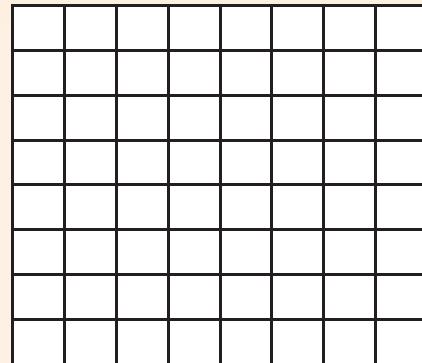
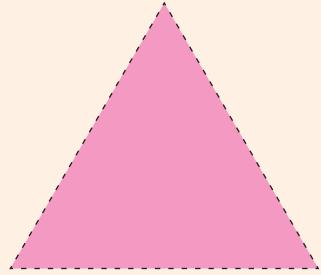
8

9

10



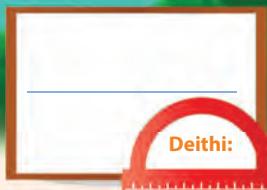
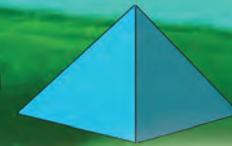
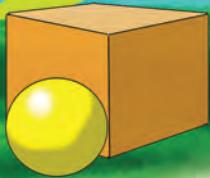
Olani zwivhumbeo kha giridi.  
Shumisani zwikwea zwi<sub>l</sub>uku uri zwi ni thuse.



Teacher:
Sign:
Date:



110

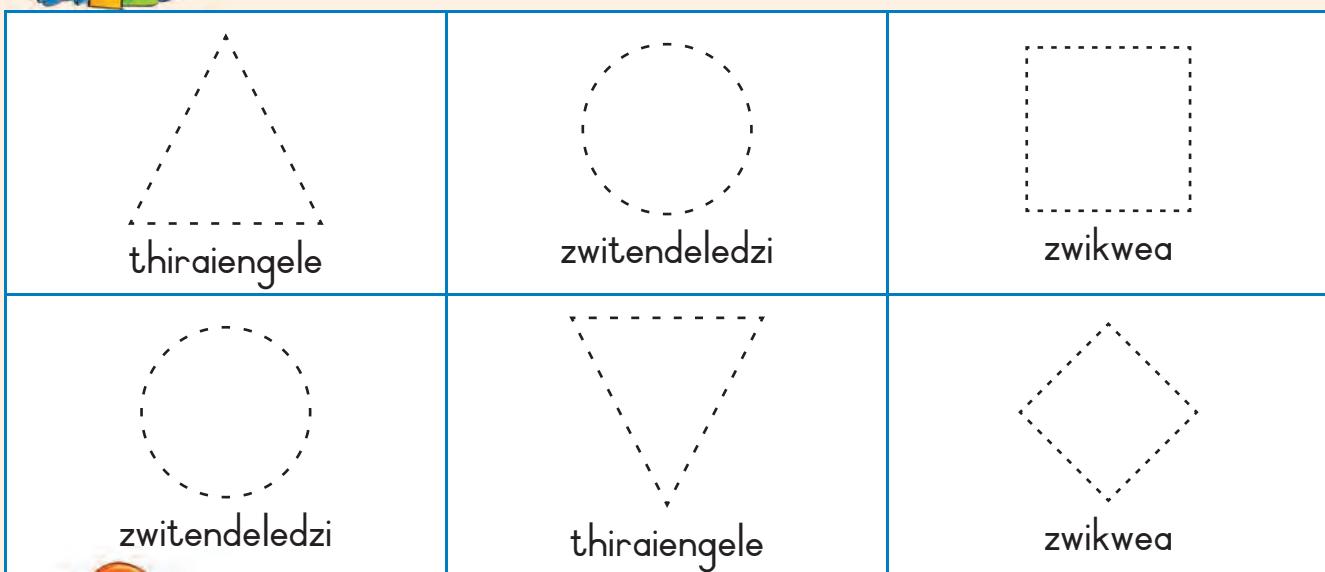


# Zwivhumbeo zwa 2-D – vhurumbutswititi na vhurumbu ha zwipulumbu

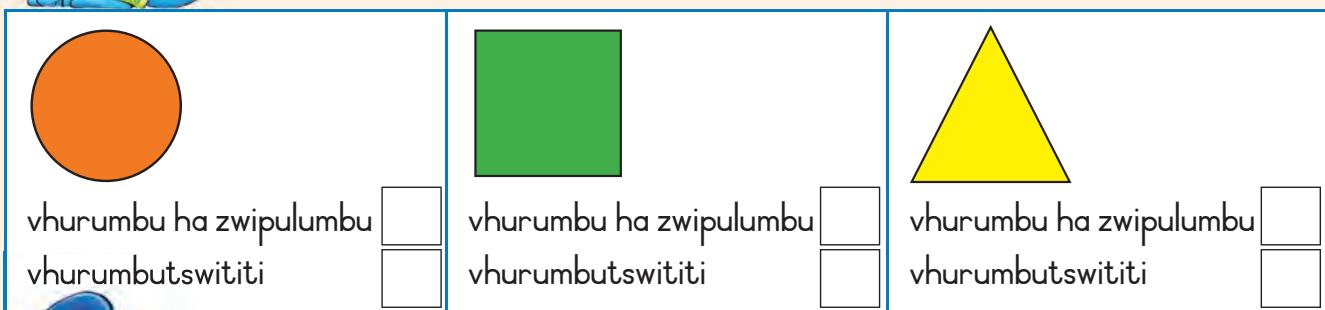


Tevhedzelani zwivhumbeo zwi tevhelaho.

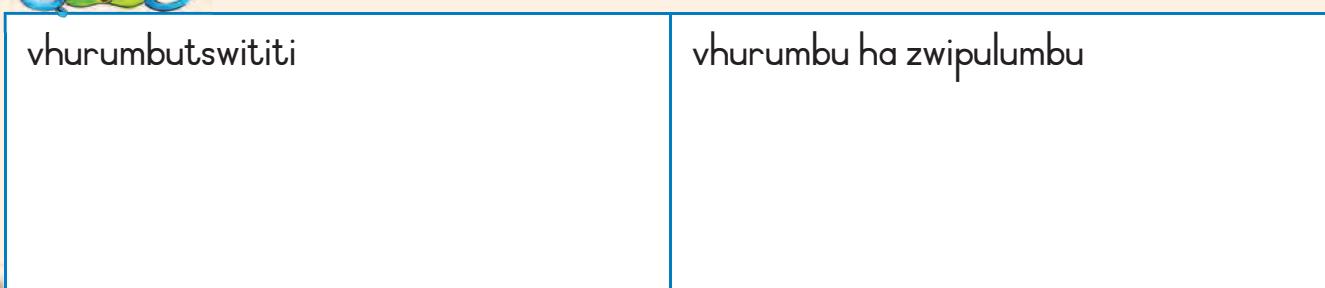
Themo ya 4



Itani thiki ni tshi sumbedza uri tshivhumbeo tshi na vhurumbutswititi kana  
vhurumbu ha zwipulumbu.



Olanı tshivhumbeo nga:

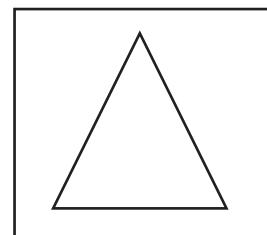
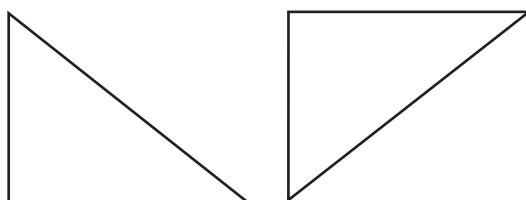
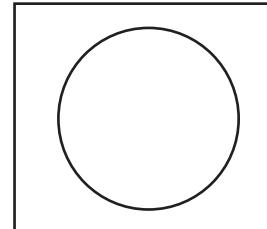
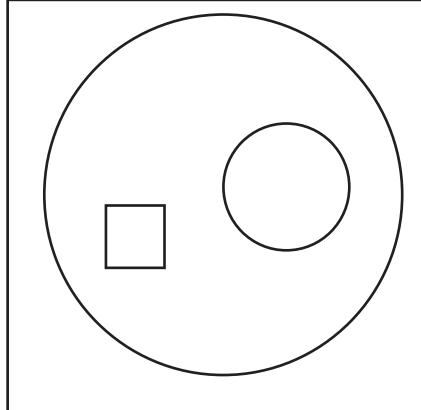
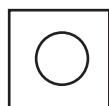
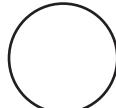


92

0 1 2 3 4 5 6 7 8 9 10



Vhalani tshivhalo tsha zwitendeledzi, zwikwea na thiraiengle.



Zwitendeledzi



Zwikwea



Thiraiengle



Wanani tshifanyiso kha magazini tsha tshithu tshi re na:

vhurumbu ha zwipulumbu

vhurumbutswititi

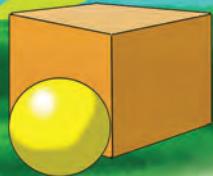


Teacher:  
Sign:

Date:



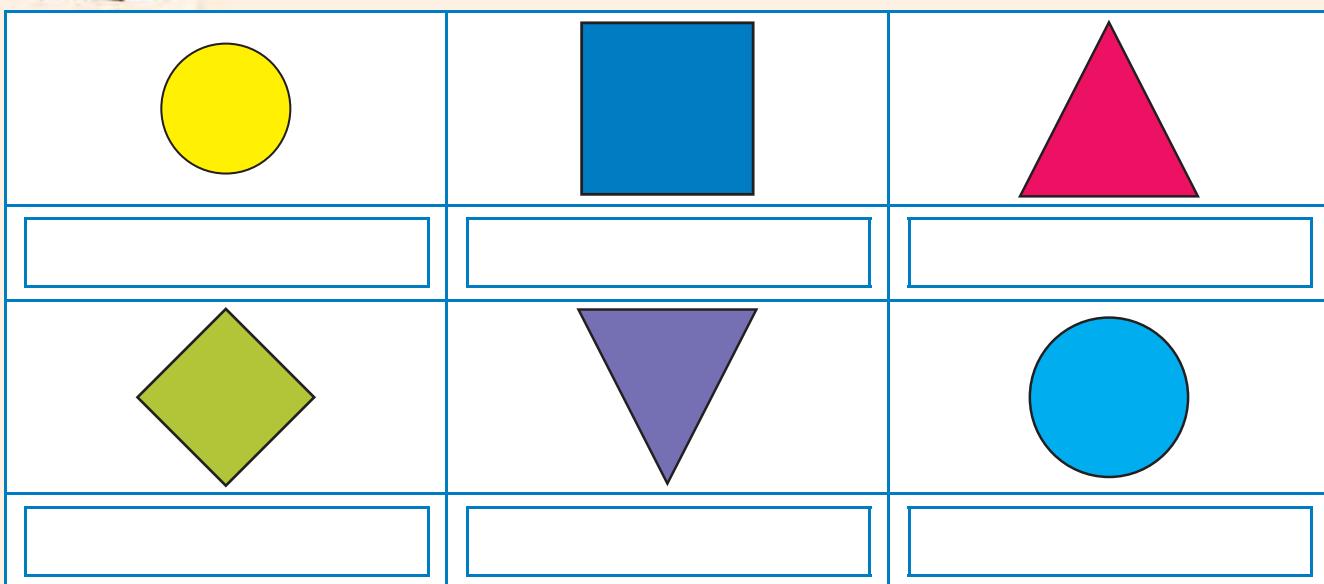
III



## Zwiňwe zwivhumbeo zwa 2-D



Bulani madzina a zwivhumbeo zwi tevhelaho:

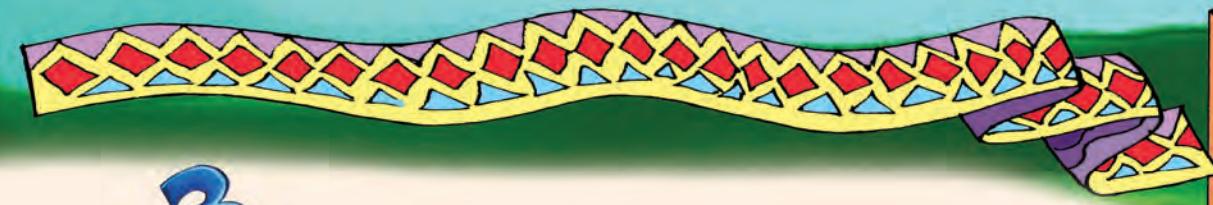


Olani tshifanyiso tshañu inwi muñe ni tshi shumisa zwitendeledzi,  
thiraiengele na zwikwea fhedzi.

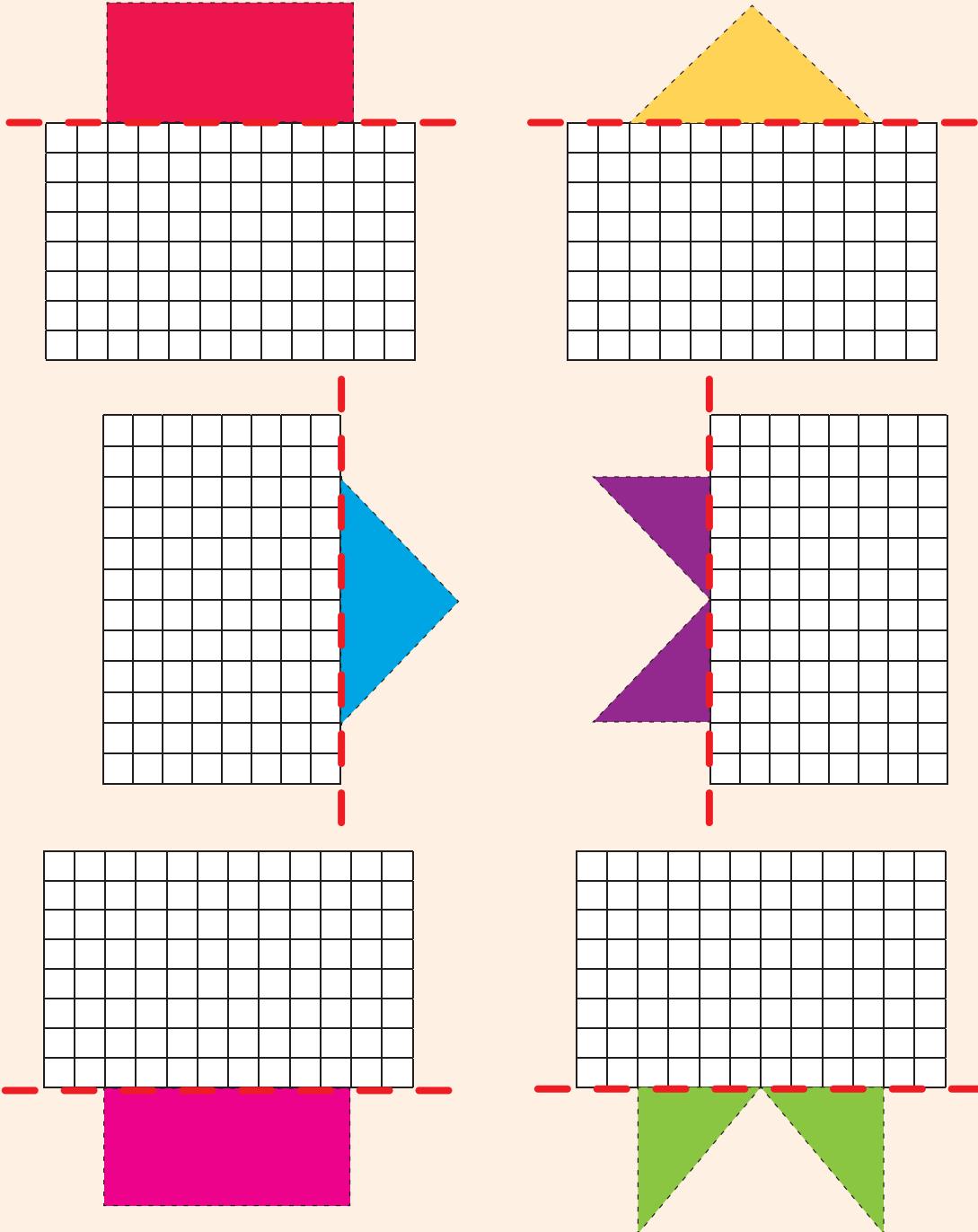


94

0 1 2 3 4 5 6 7 8 9 10



Olan iła iñwe hafu ya tshivhumbeo tshiñwe na tshiñwe.  
Shumisani tshikwea tshiñuku uri tshi ni thuse.

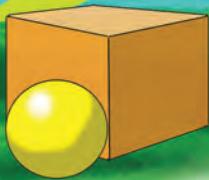


Zwoñhe zwi na vhurumbutswititi na vhurumbu ha tshipulumbu.



Teacher:  
Sign:  
Date:





## Zwigwada zwa ḫthanu u swika kha 20



Itani tshitendeledzi ni tshi vhumba zwigwada zwa ḫthanu.  
Ni na zwigwada zwingana zwa ḫthanu?

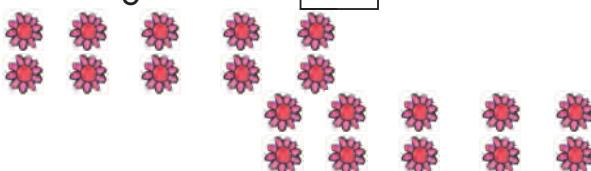
tshigwada tsha  tsha zwa 5



zwigwada zwa  zwa zwa 5



zwigwada zwa  zwa zwa 5



zwigwada zwa  zwa zwa 5



Vhalani tshivhalo tsha minwe. Nwalani phindulo yanu.



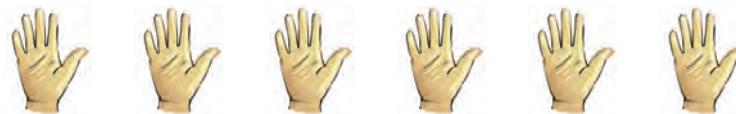
$5 + 5 + 5 =$



$5 + 5 + 5 + 5 =$



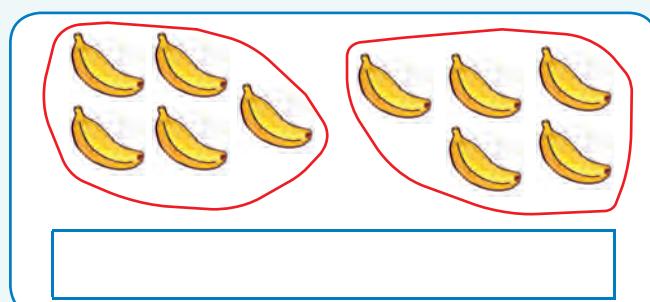
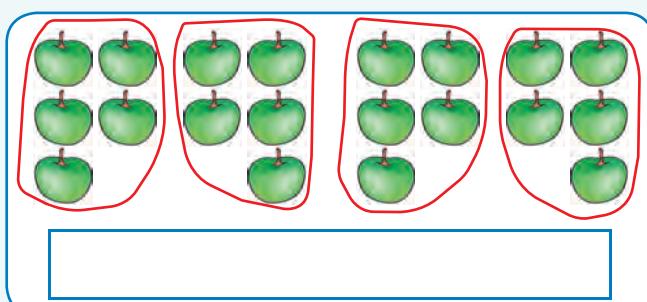
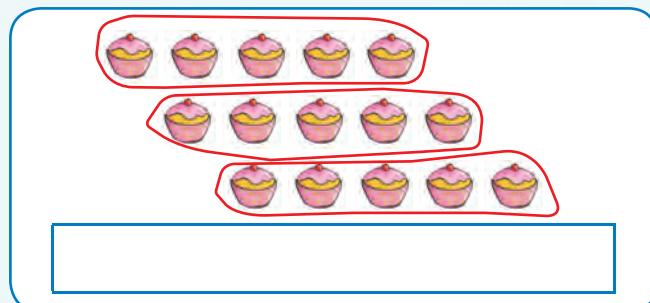
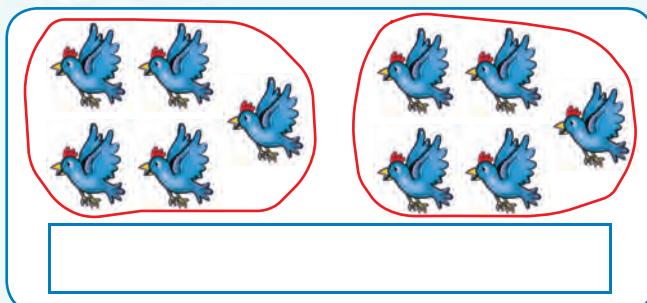
$5 + 5 + 5 + 5 + 5 =$



$5 + 5 + 5 + 5 + 5 + 5 =$



Nwalani fhungombalo la zwi tevhelaho:



Fhindulani mbudziso.



Ni kona u vhona khoini  
nngana?

I nwaleni sa  
fhungombalo:

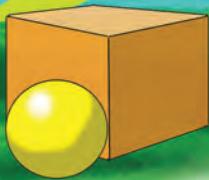


Nwalani nomboro dzi no khou t̄ahela.

I	2	3	4		6	7	8	9	
II	I2	I3	I4		I6	I7	I8	I9	



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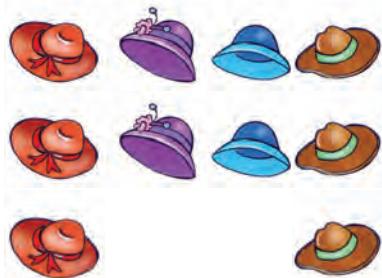
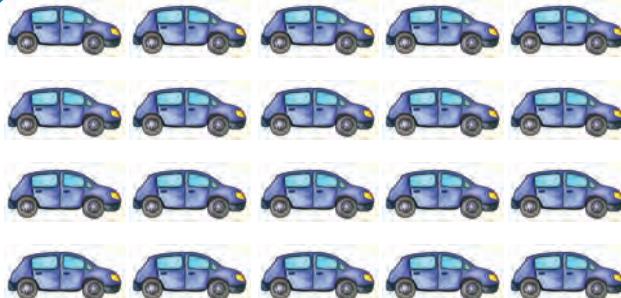
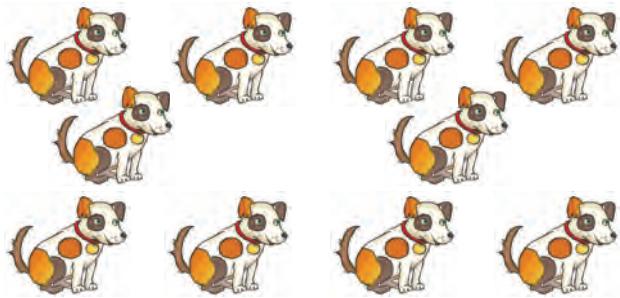


Themo ya 4



## Thanu – ndovhololo ya mutanganyo wa u swika kha 20

Itani zwigwada zwa zwi<sup>tanuzwi</sup>tanu ni nwale fhungombalo.



Olani zwigwada zwa zwivhumbeo ni tshi sumbedza mafhungombalo.

$$5 + 5 + 5 = \boxed{\quad}$$

$$5 + 5 + 5 + 5 = \boxed{\quad}$$



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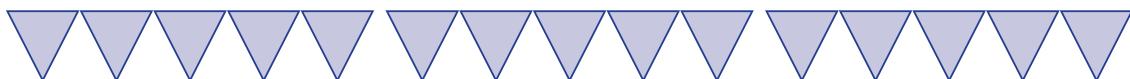
0 1 2 3 4 5 6 7 8 9 10

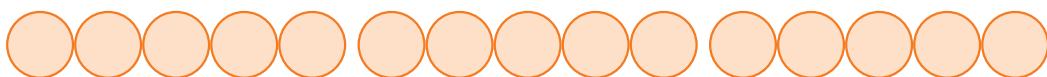


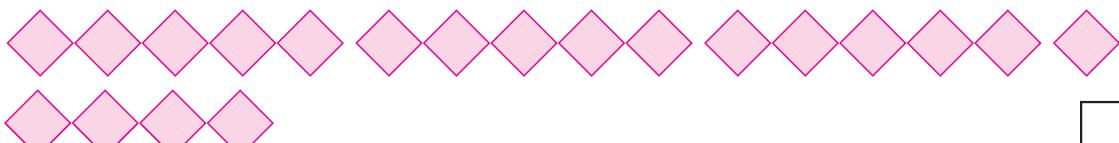
Nwalani fhungombalo la zwi tevhelaho.



$$5 + 5 =$$









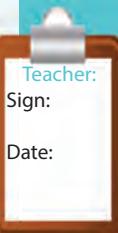
Ndi lungana hune na vhala nomboro thanu? \_\_\_\_\_

I	2	3	4	5	6	7	8	9	10
II	12	13	14	15	16	17	18	19	20

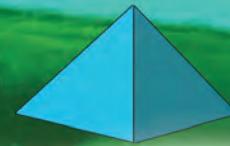
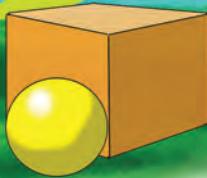


Hu na zwanda zwa 3 kha fasitere. Hu na minwe mingana kha fasitere?

Olani tshifanyiso ni nwale fhungombalo.



II 12 13 14 15 16 17 18 19 20



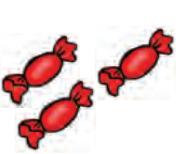
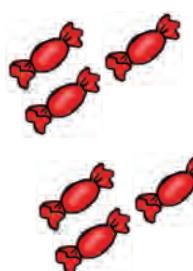
## U kovhekana u swika kha 20

Themo ya 4

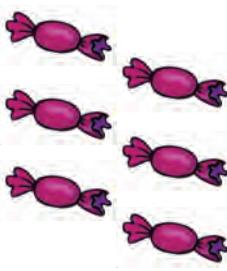
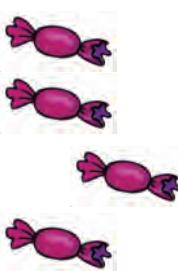


Kovhelani khonani t̄hanu malegere.

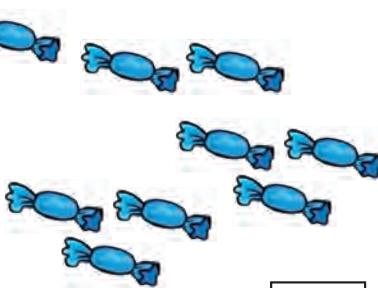
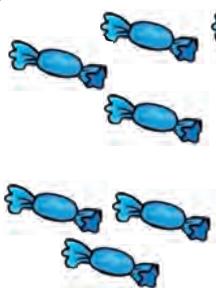
Muñwe na muñwe wavho u do wana malegere mangana?



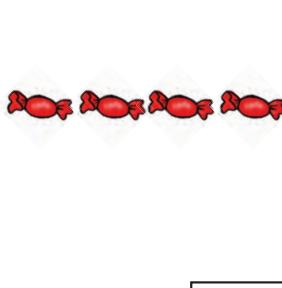
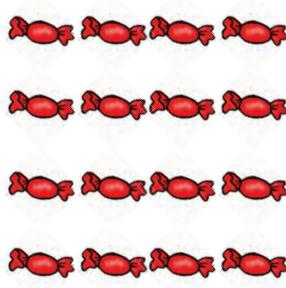
Muñwe na muñwe wavho u do  
wana malegere a



Muñwe na muñwe wavho u do  
wana malegere a



Muñwe na muñwe wavho u do  
wana malegere a



Muñwe na muñwe wavho u do  
wana malegere a

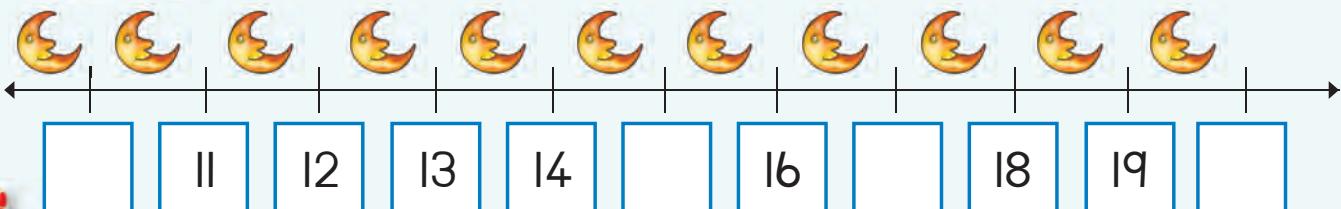


Khalarani nyandiso dza t̄hanu.

I	2	3	4	5	6	7	8	9	10
II	12	13	14	15	16	17	18	19	20



Nwalani nomboro dzi no khou t̄ahela.



100

0

1

2

3

4

5

6

7

8

9

10

Deithi:



Itani nyolo ni tshi sumbedza zwi tevhelaho.  
Hu na zwivhaleli zwo salaho?

Kovhelani vhana vha~~tanu~~ zwivhaleli zwa 10.

Ho sala zwivhaleli zwa  .

Kovhelani vhana vha~~tanu~~ zwivhaleli zwa 11.

Ho sala zwivhaleli zwa  .

Kovhelani vhana vha~~tanu~~ zwivhaleli zwa 6.

Ho sala zwivhaleli zwa  .

Kovhelani vhana vha~~tanu~~ zwivhaleli zwa 16.

Ho sala zwivhaleli zwa  .



Nwalani fhungombalo la zwi tevhelaho:



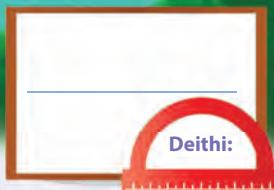
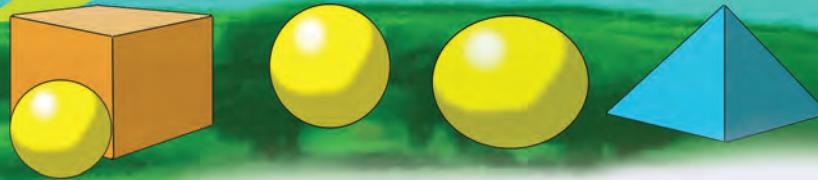
$5 + 5 =$











## Phetheni dza nomboro – tthanu u swika kha 100



Fhedzisani phetheni nga u khalara nyandiso dza tthanu.

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	100



Oiani dzihupu ni tshi sumbedza zwi tevhelaho:

86, 88, 90



70, 75, 80



55, 60, 65, 70



Shumisani watshi kha u sumbedza u vhala miminete nga mitanumitano.

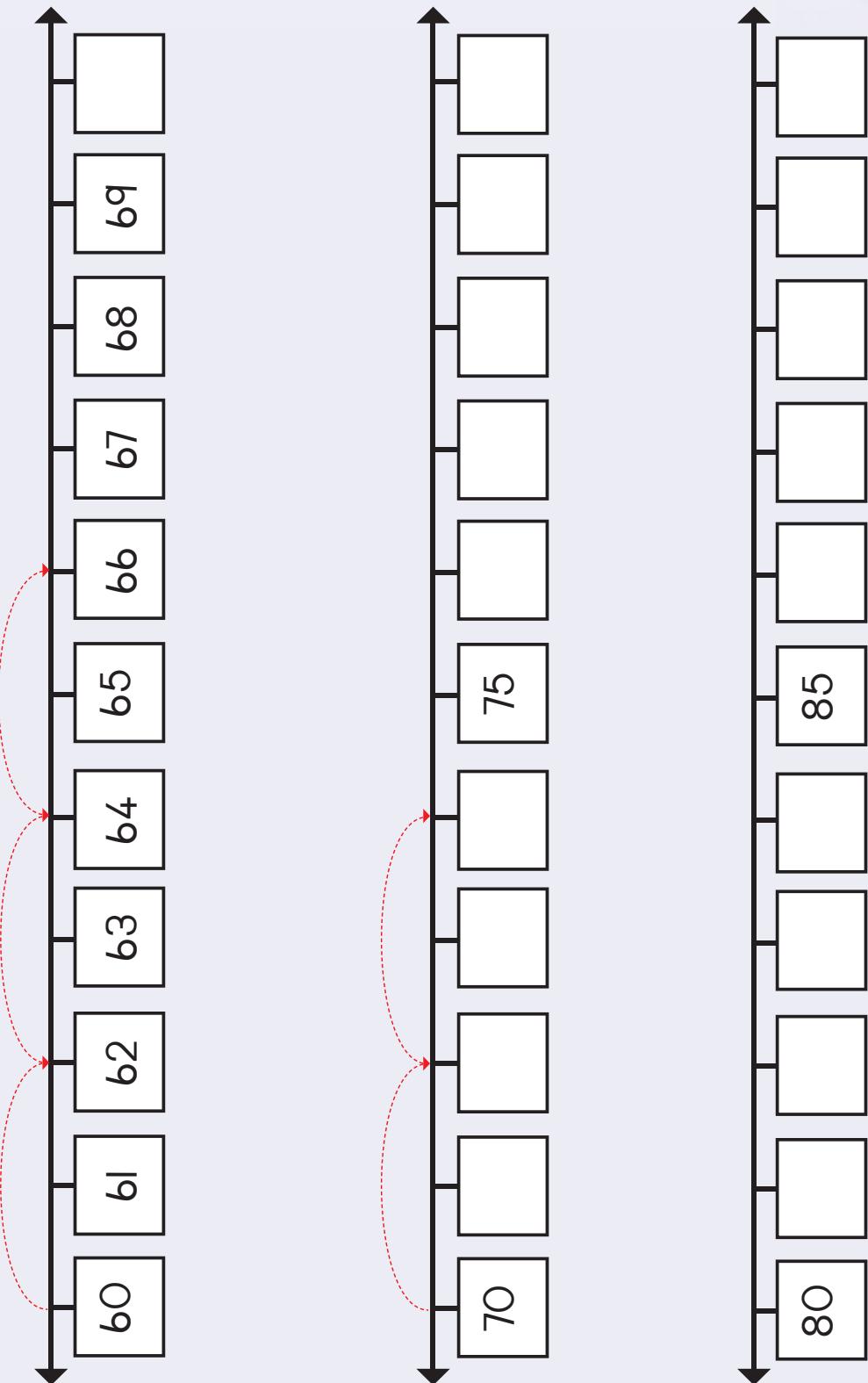




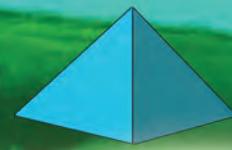
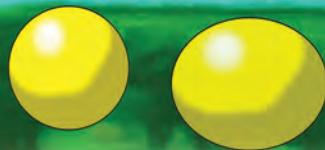
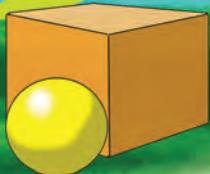
## Gerani nomboro dici no khou ተahela kha Tshigeriwa 2

ni dzi vhee kha mutalombalo.

Ni ite na u fhedzisa dzihupu.



Teacher:
Sign:
Date:



Livhanyani phanda na murahu ha tshipuka tshiñwe na tshiñwe.

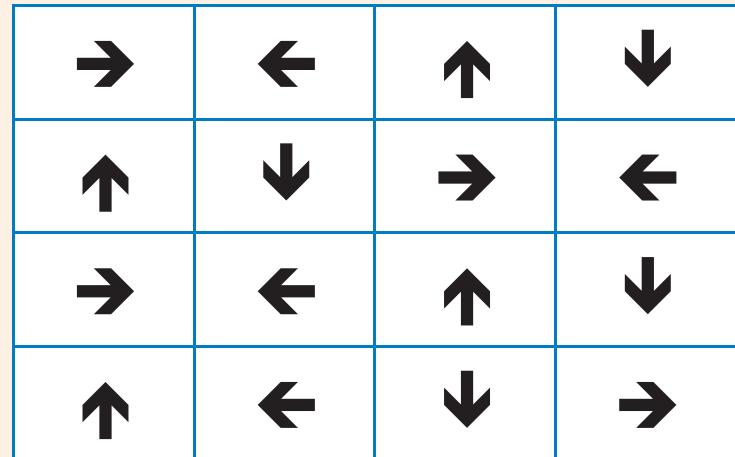
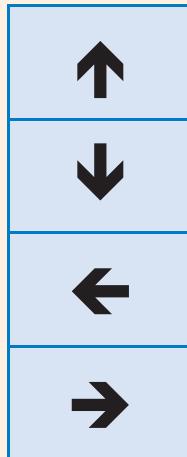
Phanda



Murahu



Tangedzelani musevhe u no yelana na musevhe u re tshibulokoni tsha lutombo.





Khałarani mbonalo yone.



Mbonalo ya nga nt̄ha

Mbonalo ya nga matungo

Mbonalo ya nga phanda



Mbonalo ya nga nt̄ha

Mbonalo ya nga matungo

Mbonalo ya nga phanda



Mbonalo ya nga murahu

Mbonalo ya nga matungo

Mbonalo ya nga phanda



Tshimange tshi ngafhi?

Khałarani phindulo i re yone.



Nga murahu

Nga phanda

Tsini na



Nga murahu

Nga phanda

Tsini na



Nga murahu

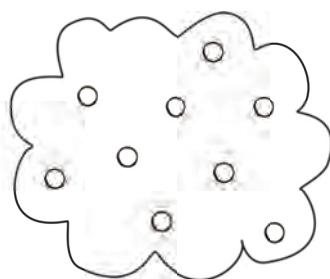
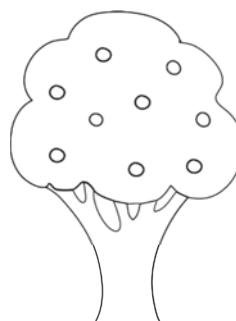
Nga phanda

Tsini na



Lavhelesani zwifanyiso  
zwa muri.

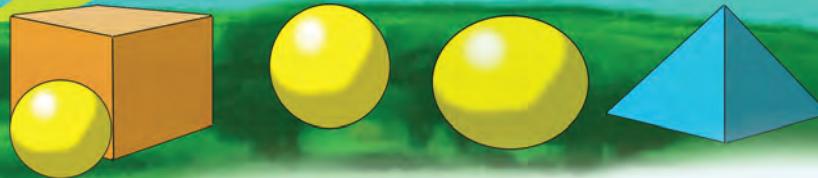
Khałarani mbonalo ya  
nga nt̄ha.



Teacher:  
Sign:

Date:





Themo ya 4

## Zwigwada zwa mbili u swika kha 20

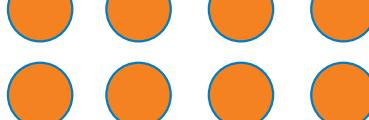


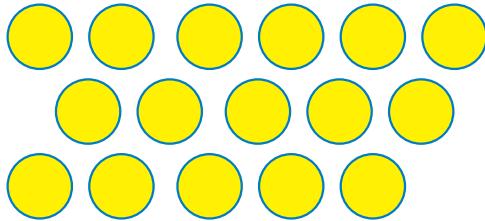
Itani zwigwada zwa zwivhilihizvihili. Nwalani uri hu na zwigwada zwingana.

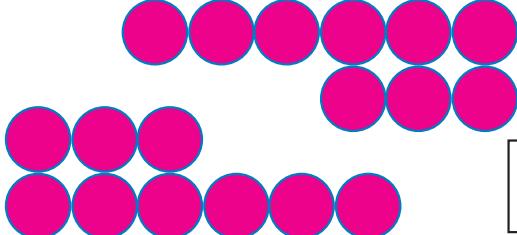






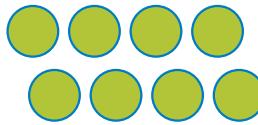
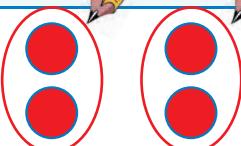








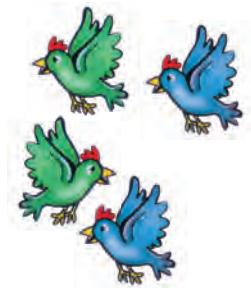
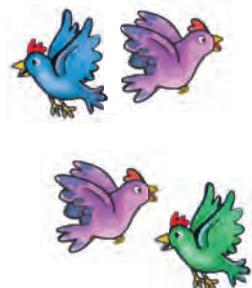
Itani zwigwada zwa zwivhili. Olani zwigwada.



Fhindulani mbudziso.



Hu na zwingoni zwingana?



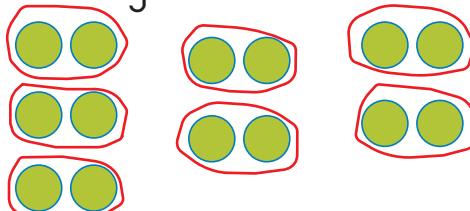
Ni nga ita zwigwada zwingana zwa zwivhili?

Nwalani fhungombalo.



Itani  
zwitendeledzi ni  
tshi vhumba zwi  
tevhelaho.

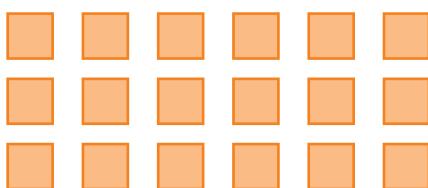
Zwigwada zwa 7 zwa 2



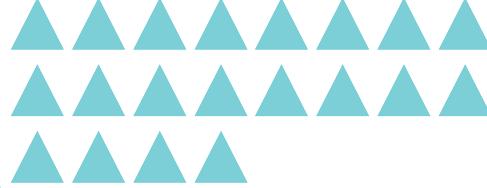
Zwigwada zwa 8 zwa 2



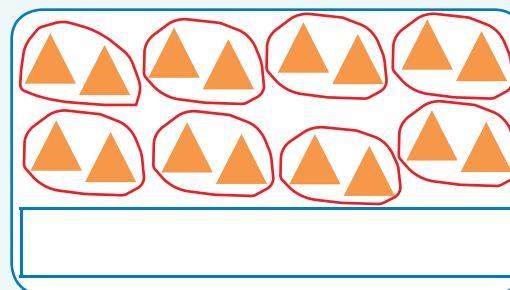
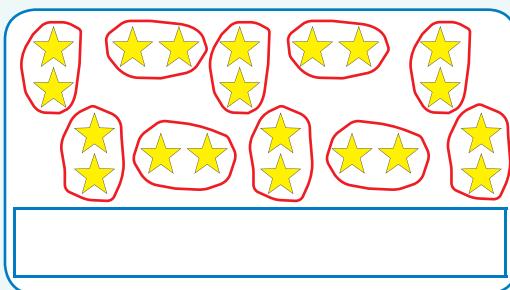
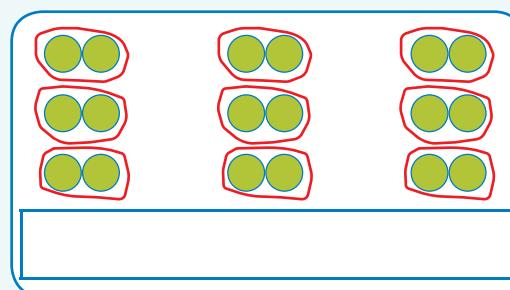
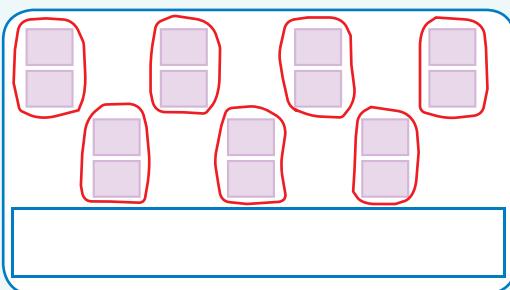
Zwigwada zwa 9 zwa 2



Zwigwada zwa 10 zwa 2



Nwalani  
fhungombalo la  
zwi tevhelaho.



Teacher:  
Sign:

Date:



11

12

13

14

15

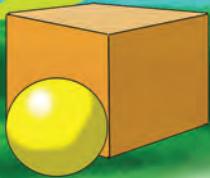
16

17

18

19

20

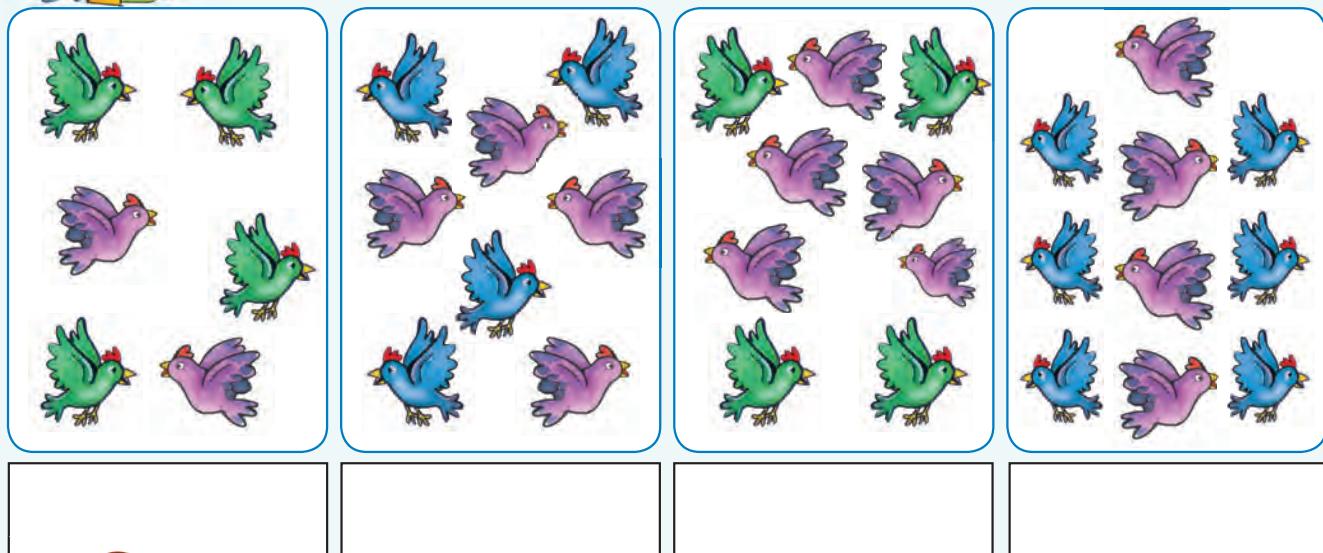


## Mbilimbili – ndovhololo ya mučanganyo u swika kha 20



Hu na milenzhe mingana? Nwalani fhungombalo la tshifanyiso tshiñwe na tshiñwe.

Themo ya 4



Olani zwivhumbeo zwa zwi tevhelaho:

$$2 + \boxed{2} + \boxed{2} + \boxed{2} + \boxed{2} + \boxed{2} + \boxed{2} = \boxed{14}$$



$$2 + \boxed{2} = \boxed{\quad}$$



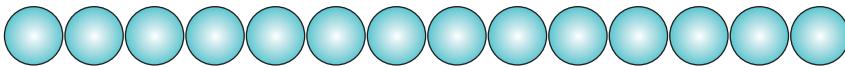
$$2 + \boxed{2} = \boxed{\quad}$$



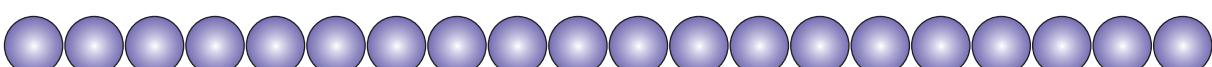
$$\boxed{2} + \boxed{2} = \boxed{\quad}$$



Nwalani fhungombalo la zwi tehelaho:



$$2 + 2 + 2 + 2 + 2 + 2 + 2 =$$



Khalaran nyandiso  
dza mbili.

I	2	3	4	5	6	7	8	9	10
II	12	13	14	15	16	17	18	19	20

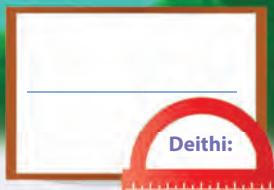
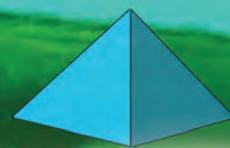
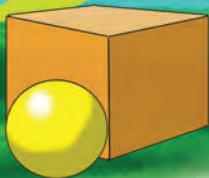


Ndi na phakethe dza 6 dzi re na malegere a 2 kha inwe na inwe.  
Ndi na malegere mangana? Olani tshifanyiso ni nwale fhungombalo.

Ndi na malegere a .



IIq



## Phetheni dza nomboro – mbili u swika kha 100

Themo ya 4



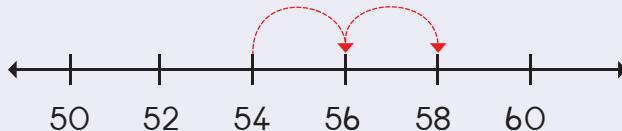
Fhedzisani phetheni nga u khalara nomboro dzone.



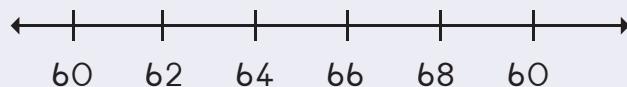
Oiani dzihupu ni tshi sumbedza zwi tevhelaho:

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	100

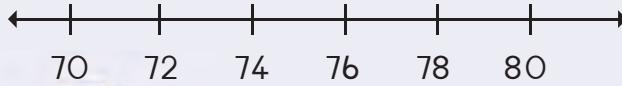
54, 56, 58



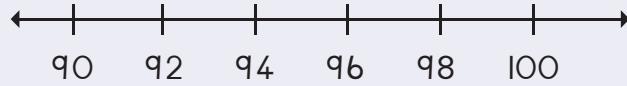
64, 66, 68



74, 76, 78



94, 96, 98

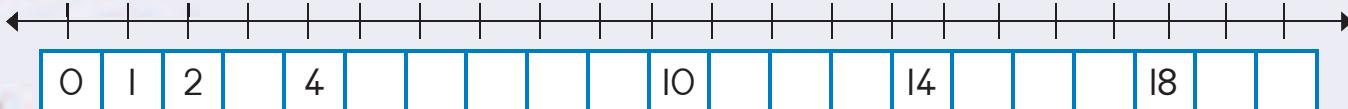


Nwalani nomboro dzi no khou t̄ahela. Khalarani phetheni: 2, 4...

I			3				7			10
II							17			20



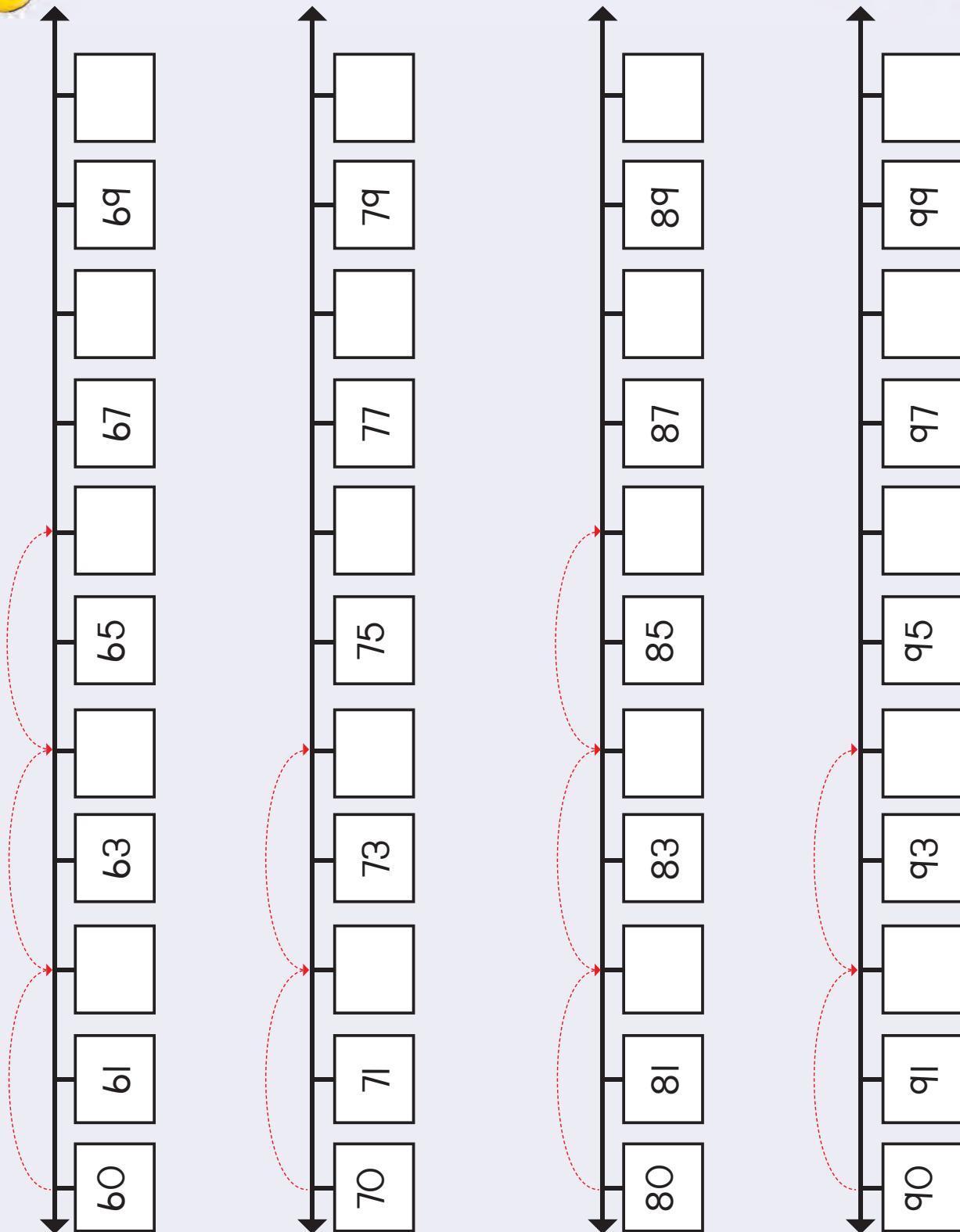
Fhedzisani mutalombalo.

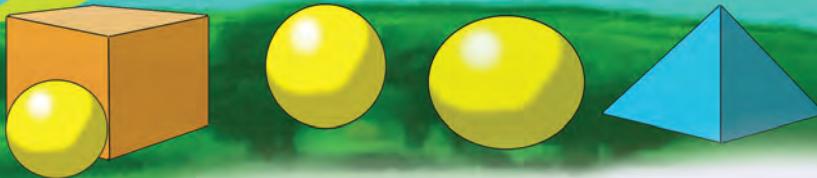


0 1 2 3 4 5 6 7 8 9 10



Gerani nomboro dzi no khou t̄ahela kha  
Tshigeriwa 2 ni dzi vhee kha mutalombalo.  
Ni ite na u fhedzisa dzihupu.



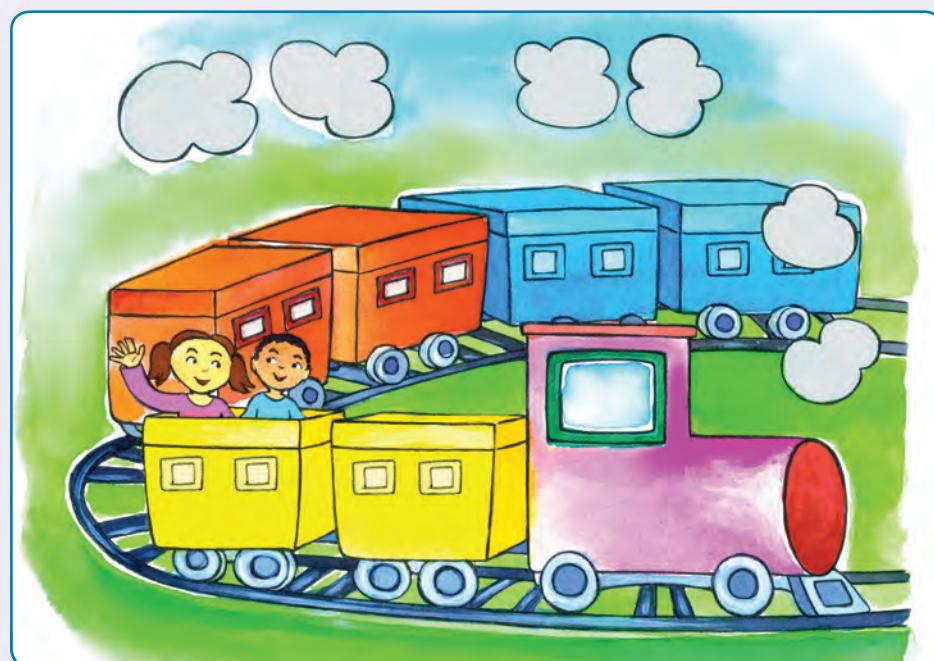


## Phetheni dza nomboro – mbili u swika kha 100

Themo ya 4



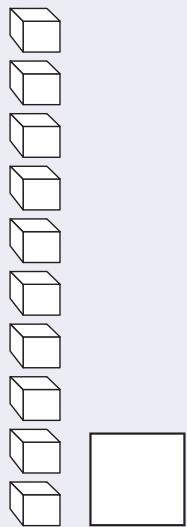
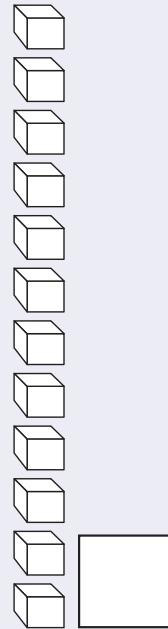
Ni a kona u vhana phetheni ya zwivhilizwihili?



Khalarani zwibulo<sup>ko</sup> ni tshi sumbedza zwigwada zwa zwivhilizwihili.  
Vhalani uri hu na zwigwada zwingana.



4

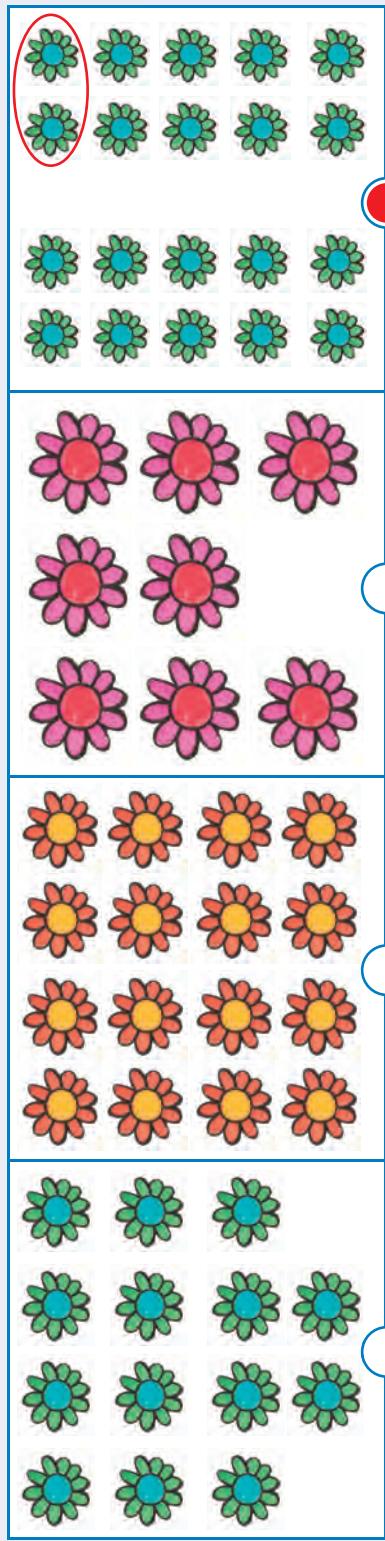


112

0 1 2 3 4 5 6 7 8 9 10



Livhanyani zwigwada zwa zwivhilizwvhili na  
fhungombalo nge na tala mutalo.

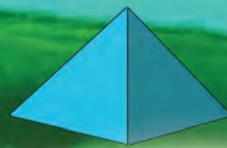
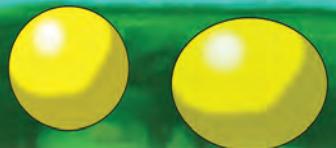
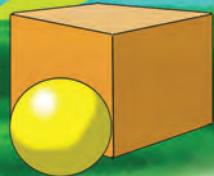


	$2 + 2 + 2 + 2 = 8$
	$2 + 2 + 2 + 2 + 2 + 2 + 2 = 14$
	$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 20$
	$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 16$



Teacher:  
Sign:  
Date:



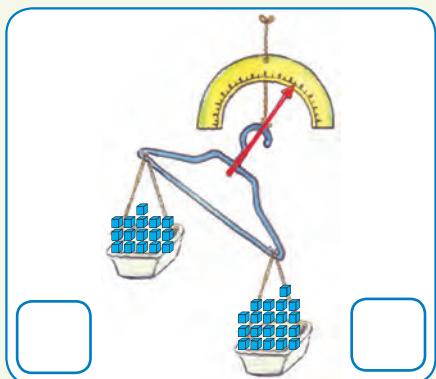
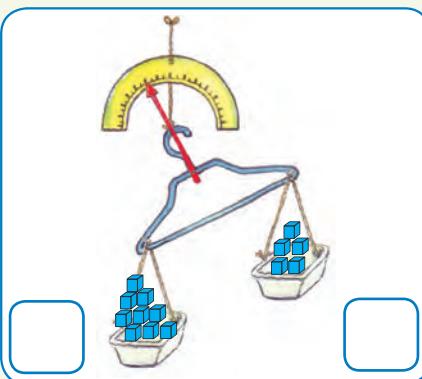
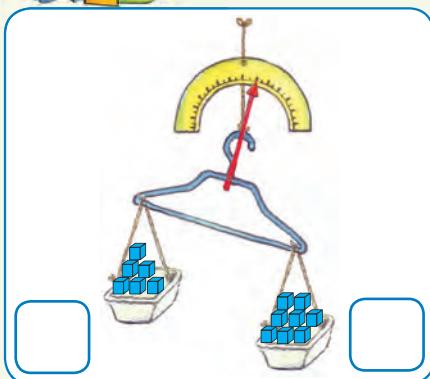


## Tshileme

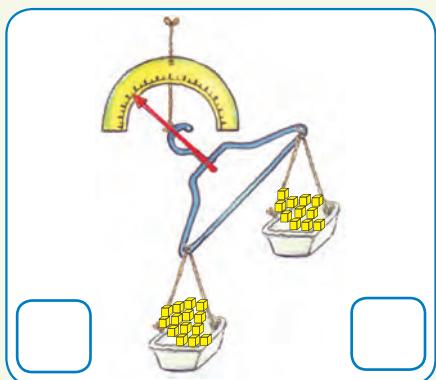
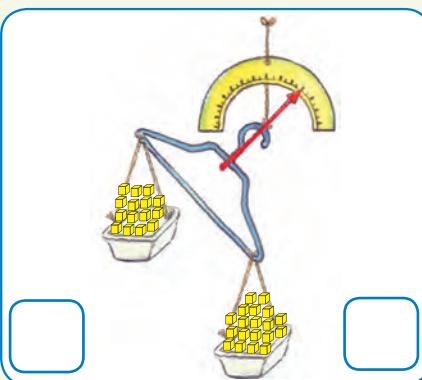
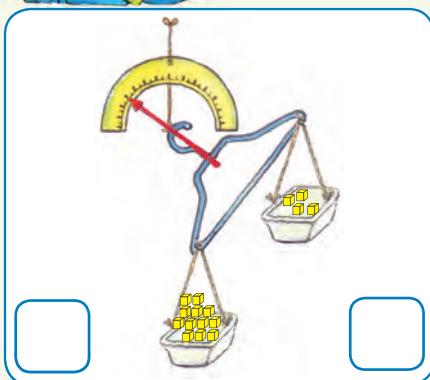
Themo ya 4



Ńwalani uri hu na zwibuloko zwingana kha tshifaredzi tshiñwe na tshiñwe.  
Tangedzelani tshifaredzi tshi no lemelesa.



Ńwalani uri hu na zwibuloko zwingana kha tshifaredzi tshiñwe na tshiñwe.  
Tangedzelani tshifaredzi tshi no leluwesa.

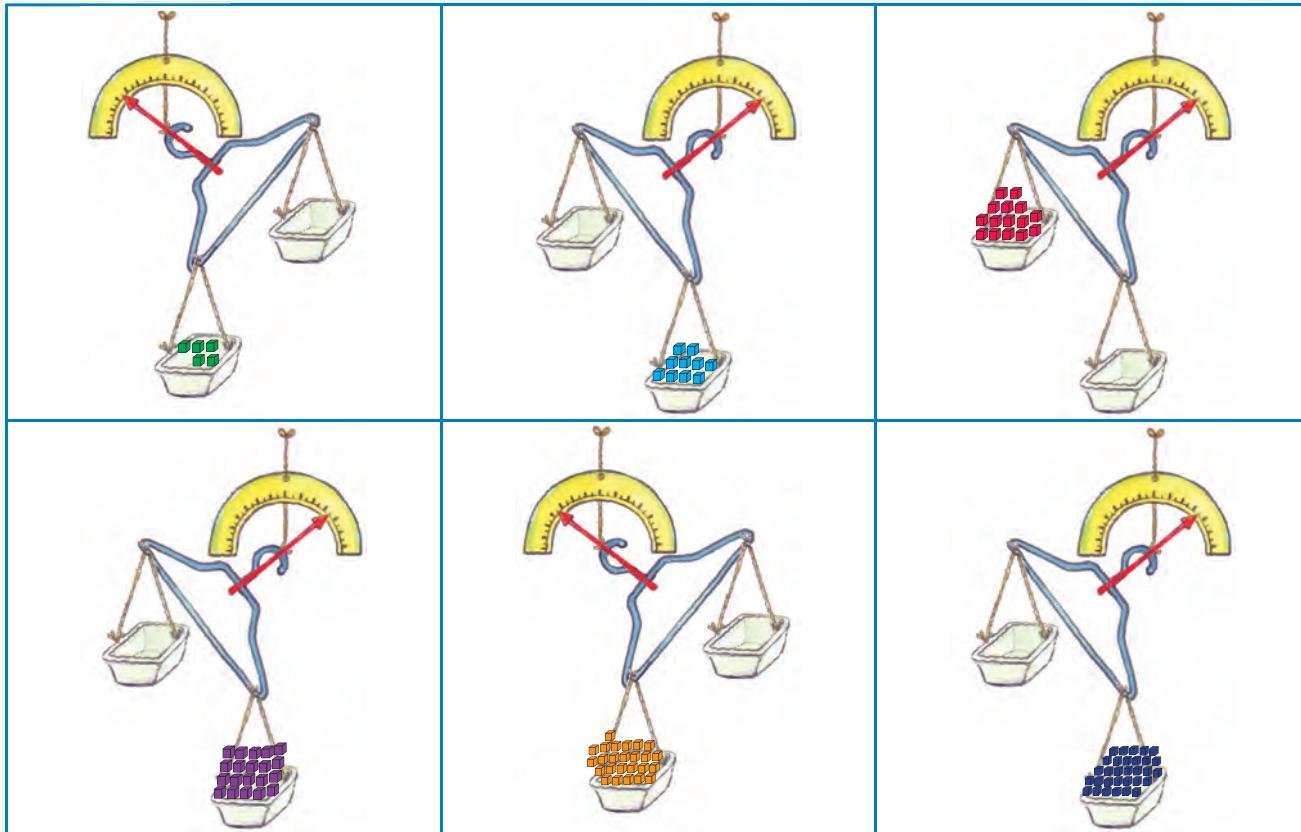


Vhalani uri hu na zwibuloko zwingana. Ni wane uri hu ɻodea zwiñwe zwibuloko zwingana zwa u engedza nga nt̄ha u itela u balantsa thoyi. Ro ni vhudza uri thoyi i lemela zwibuloko zwingana.





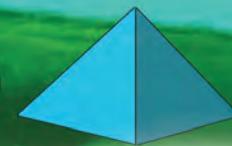
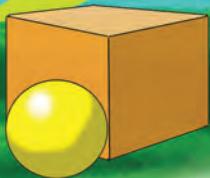
Olani tshithu tshine tsha lamelesa kana tsha leluwesa u fhira zwibuloko.



Shumisani zwithu zwa 5 zwi re disiken iyanu. Thomani nga u anganyela uri zwi lemela vhugai ni kole u zwi kala kha tshikalo kana tshikalotshilinganyisi u itela u vhona arali nyanganyelo iyanu i yone.

Olani tshithu	Humbulelani	Tshileme	Phambano
	zwibuloko zwa ____	zwibuloko zwa ____	____ - ____ = ____





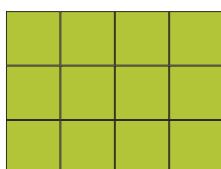
## U inga kavhili

Themo ya 4

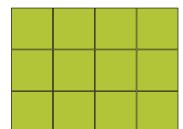
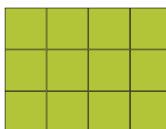


Fhindulani zwi tevhelaho:

Hu na zwikwea zwingana?

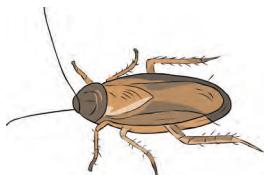



Hu na zwingana zwino?

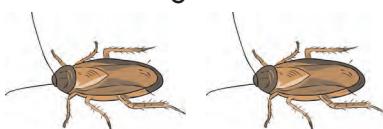



Ri ri 12 yo ingwa kavhili ndi 24.

Hu na milenzhe mingana?




Hu na milenzhe mingana zwino?




Ri ri 6 yo ingwa kavhili ndi

Hu na zwikitili zwingana?




Hu na zwikitili zwingana zwino?




Ri ri 10 yo ingwa kavhili ndi

Hu na maduvha mangana kha vhege?

S	M	T	W	T	F	S

Hu na maduvha mangana kha vhege mbili?

S	M	T	W	T	F	S

Ri ri 7 yo ingwa kavhili ndi

Hu na khirayoni nngana?




Hu na khirayoni nngana zwino?




Ri ri 8 yo ingwa kavhili ndi



0

1

2

3

4

5

6

7

8

9

10



Nwalani  
phindulo.

Nyingakavhili ya 4	=	8 
Nyingakavhili ya 10	=	
Nyingakavhili ya 11	=	
Nyingakavhili ya 2	=	
Nyingakavhili ya 6	=	



Nwalani phindulo.

Nyingakavhili ya mbili ndi	 ina
Nyingakavhili ya raru ndi	
Nyingakavhili ya ina ndi	
Nyingakavhili ya thanu ndi	
Nyingakavhili ya rathi ndi	
Nyingakavhili ya sumbe ndi	

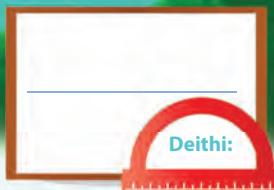
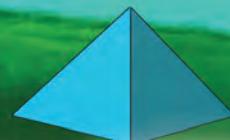
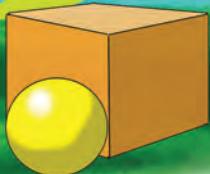


Fhedzisani thebulu.

$9 + 9 + 1 =$	<input type="text"/>	kana	$Ho ingwa kavhili 9 + 1 =$	<input type="text"/>
<input type="text"/>	<input type="text"/>	kana	$Ho ingwa kavhili 8 + 1 =$	<input type="text"/>
$10 + 10 + 1 =$	<input type="text"/>	kana		<input type="text"/>
$7 + 7 + 1 =$	<input type="text"/>	kana	$Ho ingwa kavhili 7 + 1 =$	<input type="text"/>



123

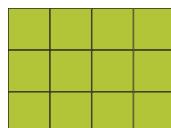
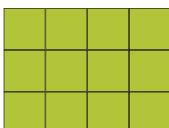


Themo ya 4

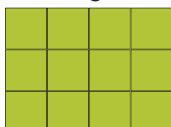


Findulani zwi tevhelaho:

Hu na zwikwea zwingana?

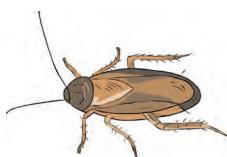
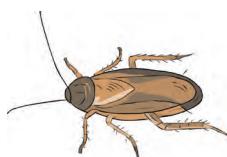


Hu na zwikwea zwingana zwino?

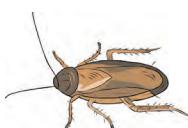


Ri ri hafu ya 24 ndi 12.

Hu na milenzhe mingana?



Hu na milenzhe mingana zwino?



Ri hafu ya 12 ndi

Hu na zwikitili zwingana?



Hu na zwikitili zwingana zwino?



Ri hafu ya 20 ndi

Hu na maduvha mangana kha vhege mbili?

S	M	T	W	T	F	S

Hu na maduvha mangana kha vhege nthihi?

S	M	T	W	T	F	S

Ri hafu ya 14 ndi

Hu na khirayoni nngana?



Hu na khirayoni nngana zwino?



Ri hafu ya 16 ndi



0

1

2

3

4

5

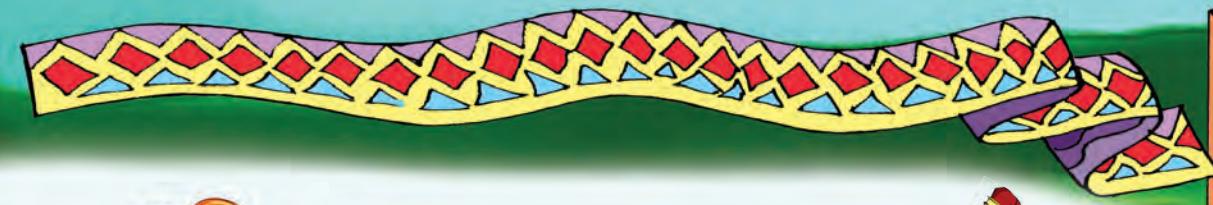
6

7

8

9

10



Nwalani  
phindulo.

Hafu ya 8	=	4
Hafu ya 10	=	
Hafu ya 6	=	
Hafu ya 12	=	
Hafu ya 14	=	



Nwalani phindulo.

Hafu ya <b>iña</b> ndi	mbili
Hafu ya <b>rathi</b> ndi	
Hafu ya <b>mbili</b> ndi	
Hafu ya <b>malo</b> ndi	
Hafu ya <b>fumi</b> ndi	



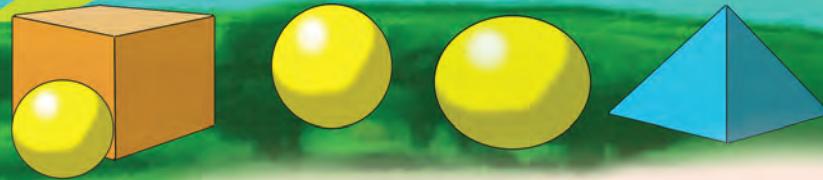
Nwalani phindulo.

Hafu ya <b>10</b> ndi	5
Hafu ya <b>12</b> ndi	
Hafu ya <b>14</b> ndi	
Hafu ya <b>16</b> ndi	
Hafu ya <b>18</b> ndi	



Teacher:  
Sign:  
Date:



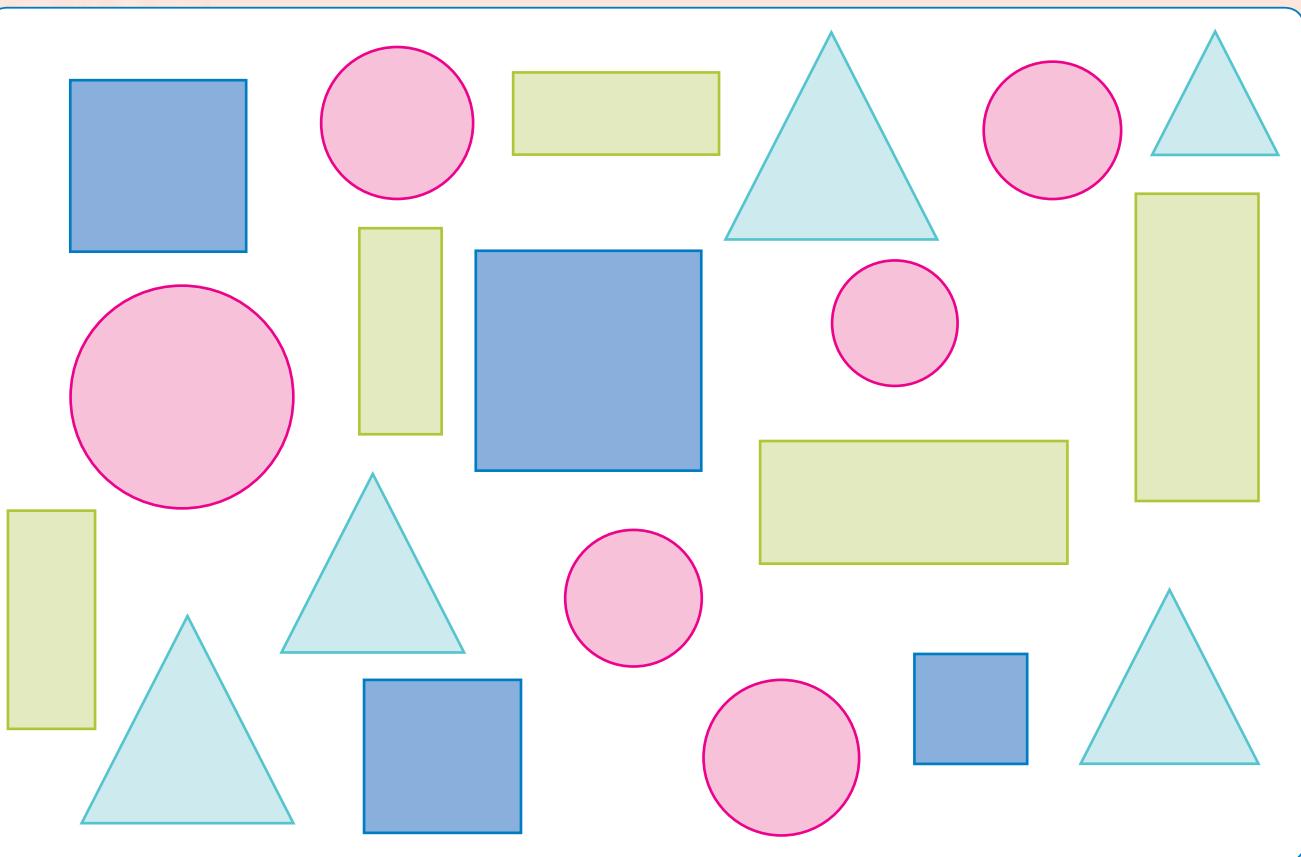


# Data



Vhalani uri hu na zwivhumbeo zwingana zwo fhambananaho, ni kone u fhindula mbudziso.

Themo ya 4



I. Hu na zwikwea zwingana?



2. Hu na thiraiengele nngana?



3. Hu na rekithiengele nngana?



4. Hu na zwiendeledzi zwingana?





Mitshelo iyi yo nangiwa nga khonani dzañu dza 20.  
Vhekanyani mitshelo ni ite nyolo kha phikhitogirafu  
(girafu ya zwifanyiso) ya mitshelo ye na i vhekanya ni kone u  
fhindula mbudziso dzi re nga fhasi.

Mutshelo une ra u funesa?

Khii =



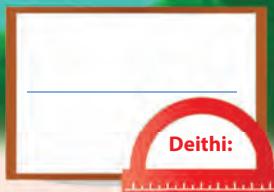
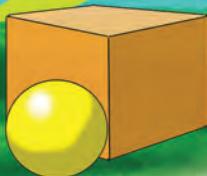
Zwitiroberi	Maapula	Mapiere	Miomva	Maswiri

Ndi vhana vhangana vha no funesa zwitoroberi?	
Ndi vhana vhangana vha no funesa maapula?	
Ndi vhana vhangana vha no funesa mapiere?	
Ndi vhana vhangana vha no funesa miomva?	
Ndi vhana vhangana vha no funesa maswiri?	
Ndi mutshelo ufhio u no funeswa nga vhana?	
Ndi mutshelo ufhio u sa funeswi nga vhana?	



Teacher:  
Sign:  
Date:





## Data iñwe hafhu



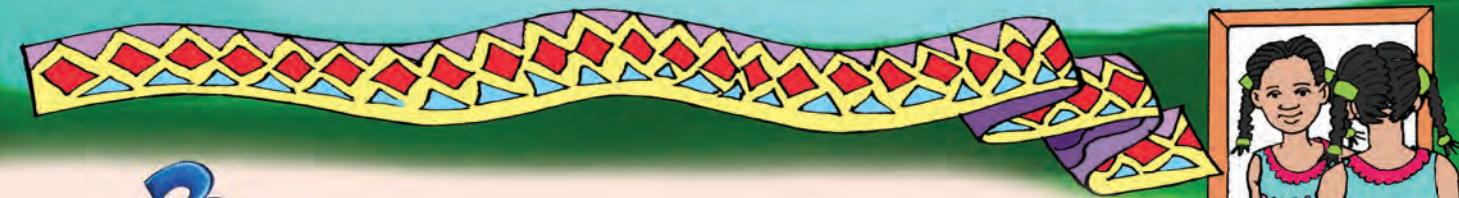
Vhana vha re kīlasini vha na thoyi (zwitambiswa) dzi tevhelaho.  
Vha na nngana dza lushaka luñwe na luñwe?

Themo ya 4



Fhedzisani thebulu.

Thoyi	Nomboro (Tshivhalo)
Mipopi	
Matiraka	
Thedibee	
Roboto	

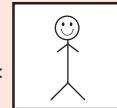


Fhedzisani phikhithogirafu nga u ola zwivhalo zwo linganaho  
zwa vhatthu vha zwitanda vho imela lushaka lunwe na lunwe  
lwa thoyi.



Thoyi dzi re hone

Khii =

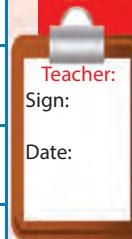


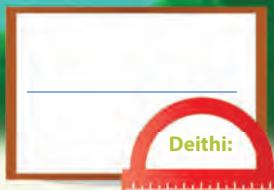
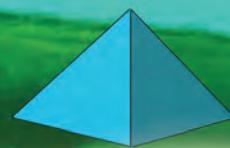
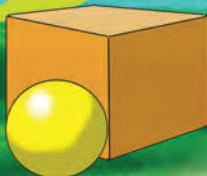
Mipopi	Matiraka	Thedibee	Roboto



Fhindulani mbudziso. Lavhelesani phikhitogirafu uri i ni thuse.

Ndi vhana vhangana vha re na mpopi?	
Ndi vhana vhangana vha re na tiraka?	
Ndi vhana vhangana vha re na thedibee?	
Ndi vhana vhangana vha re na roboto?	
Ndi thoyi ifhio i no takaleleswa?	
Ndi thoyi ifhio i sa takaleleswi?	





## Khaphasithi (Ndadzo)

Themo ya 4



Ri ela zwiludi nga ndilade? Talani mutalo ni tshi livhanya tshithu na tshishumiswa tshone tsha u kala.



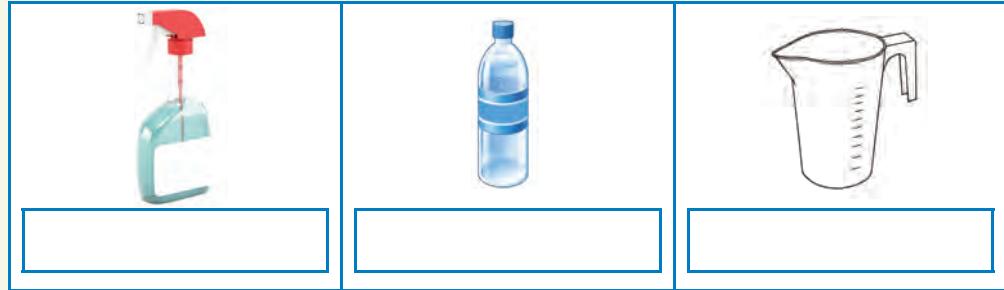
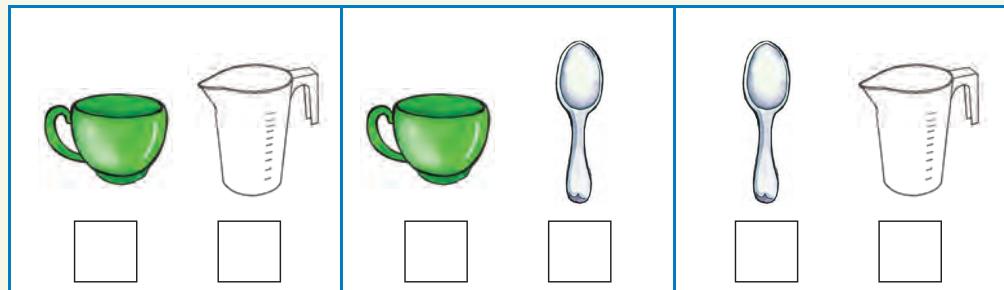
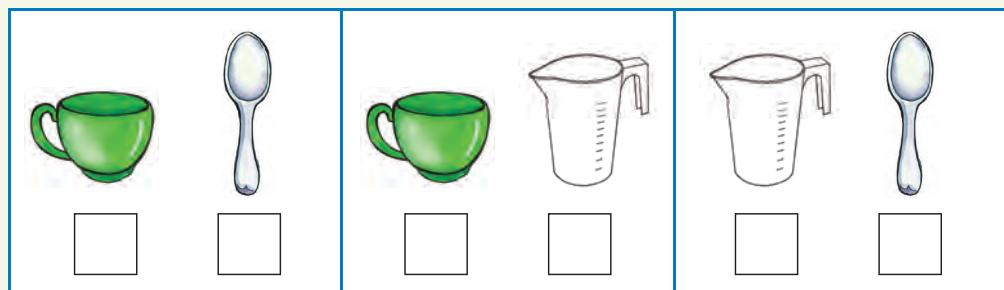
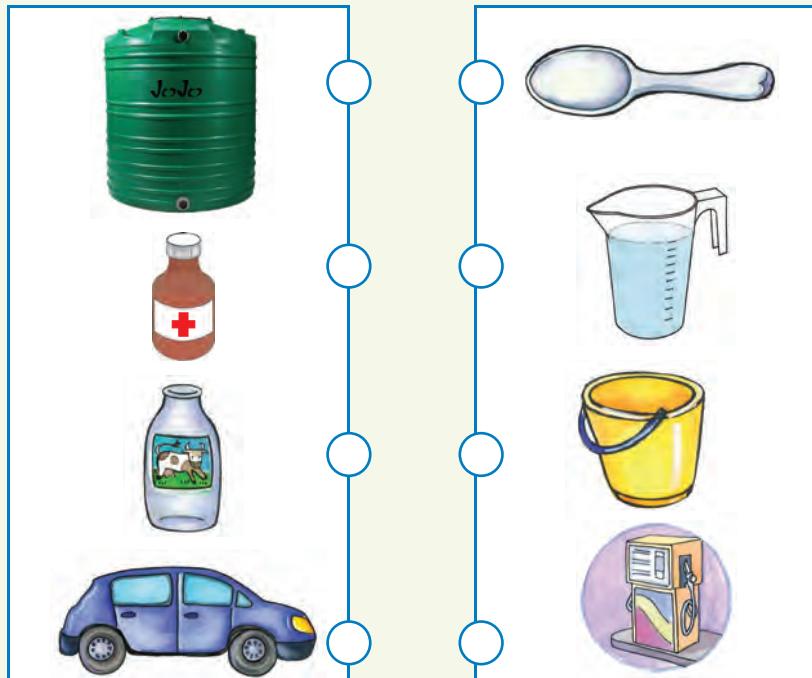
Itani thiki kha tshifaredzi (mudzio) tshi no fara zwi<sup>u</sup>tukutuku.



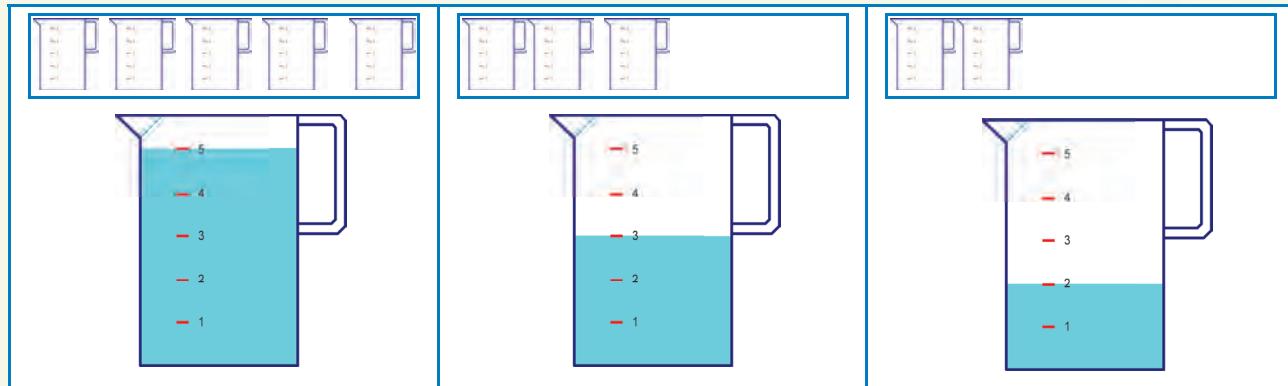
Itani thiki kha tshifaredzi (mudzio) tshi no fara zwinzhizwinzhi.



Zwifaredzi zwo dala kana ndi xoxoyo a zwi na tshithu? (a zwi na tshithu)



Ni tea u shumisa khaphu t̄hanu kha u dadza dzhege. Ndi khaphu nngana nga nt̄ha dzine na tea u shumisa kha u dadza idzo dziñwe dzhege mbili?  
Zwi oleni.



Khalarani tshivhalo tsho tsha zwiludi.

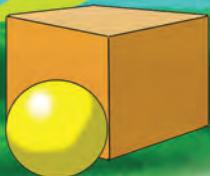
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Date:



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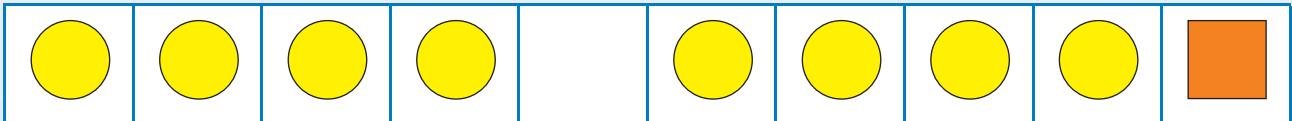
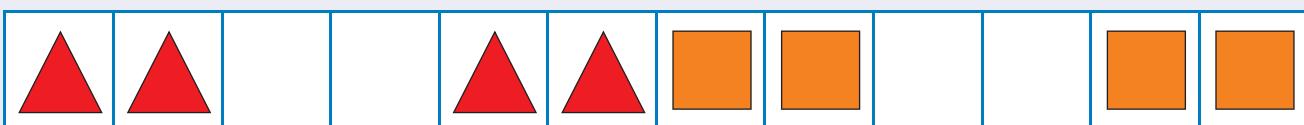
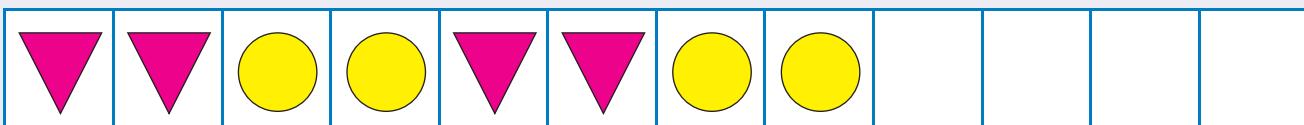
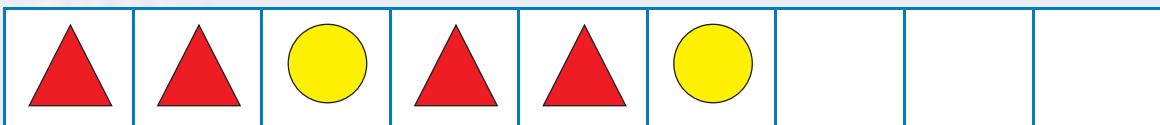


## Phetheni dza dzhometiri



Fhedzisani phetheni.

Themo ya 4



126

0 1 2 3 4 5 6 7 8 9 10



Engedzani phetheni.



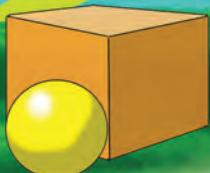

Itani phetheni dza inwi muñe ni tshi shumisa zwitendeledzi, zwikwea na thiraiengele.




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Date:



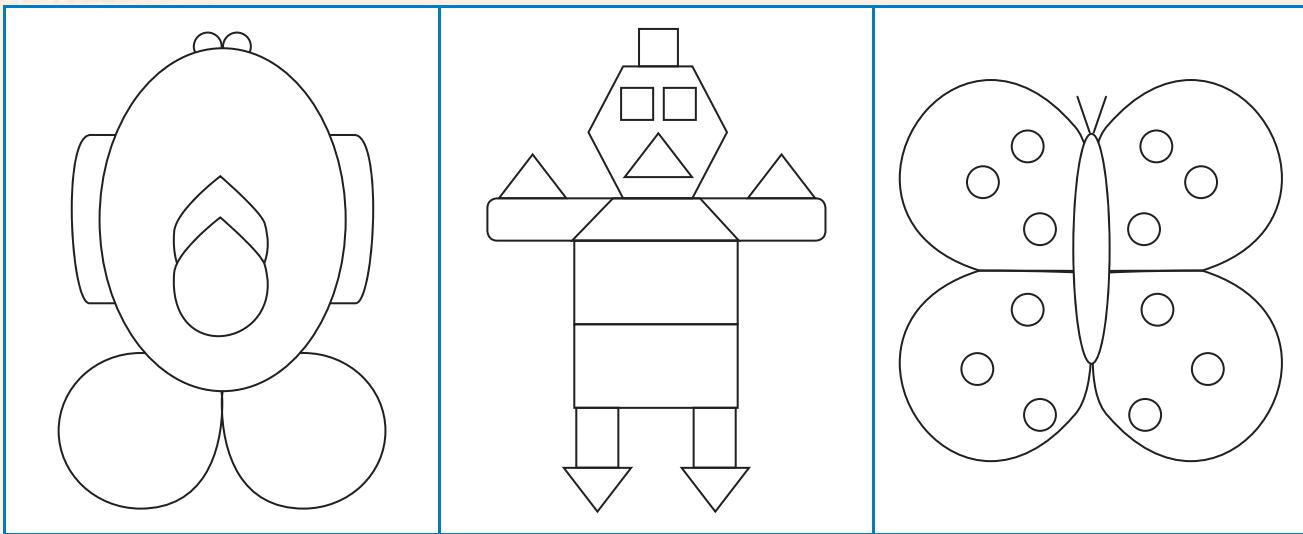


## Ndinganahuvhili

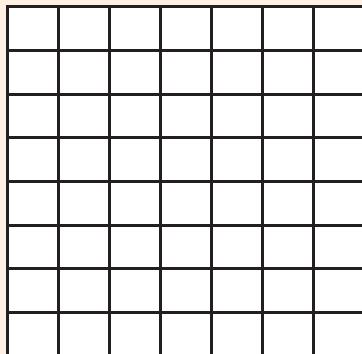
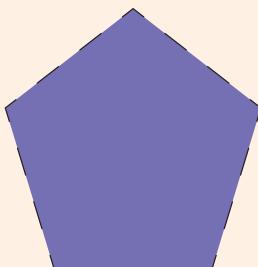
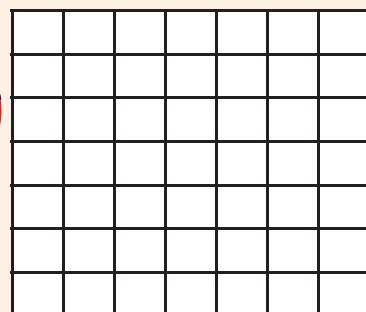
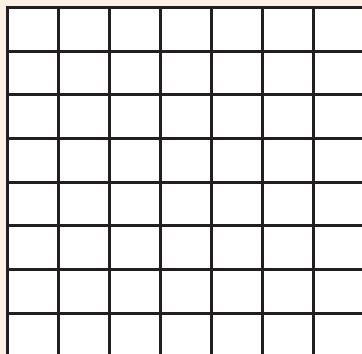
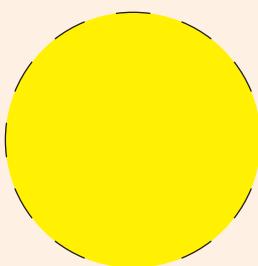
Themo ya 4

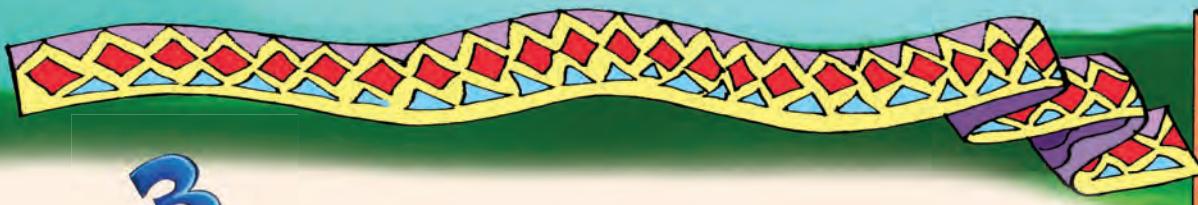


Talani mutalo wa ndinganahuvhili u no fhandula tshifanyiso tsha bva hafu mbili dzi no lingana. Khałarani hafu nthihi ya tshifanyiso tshiñwe na tshiñwe.

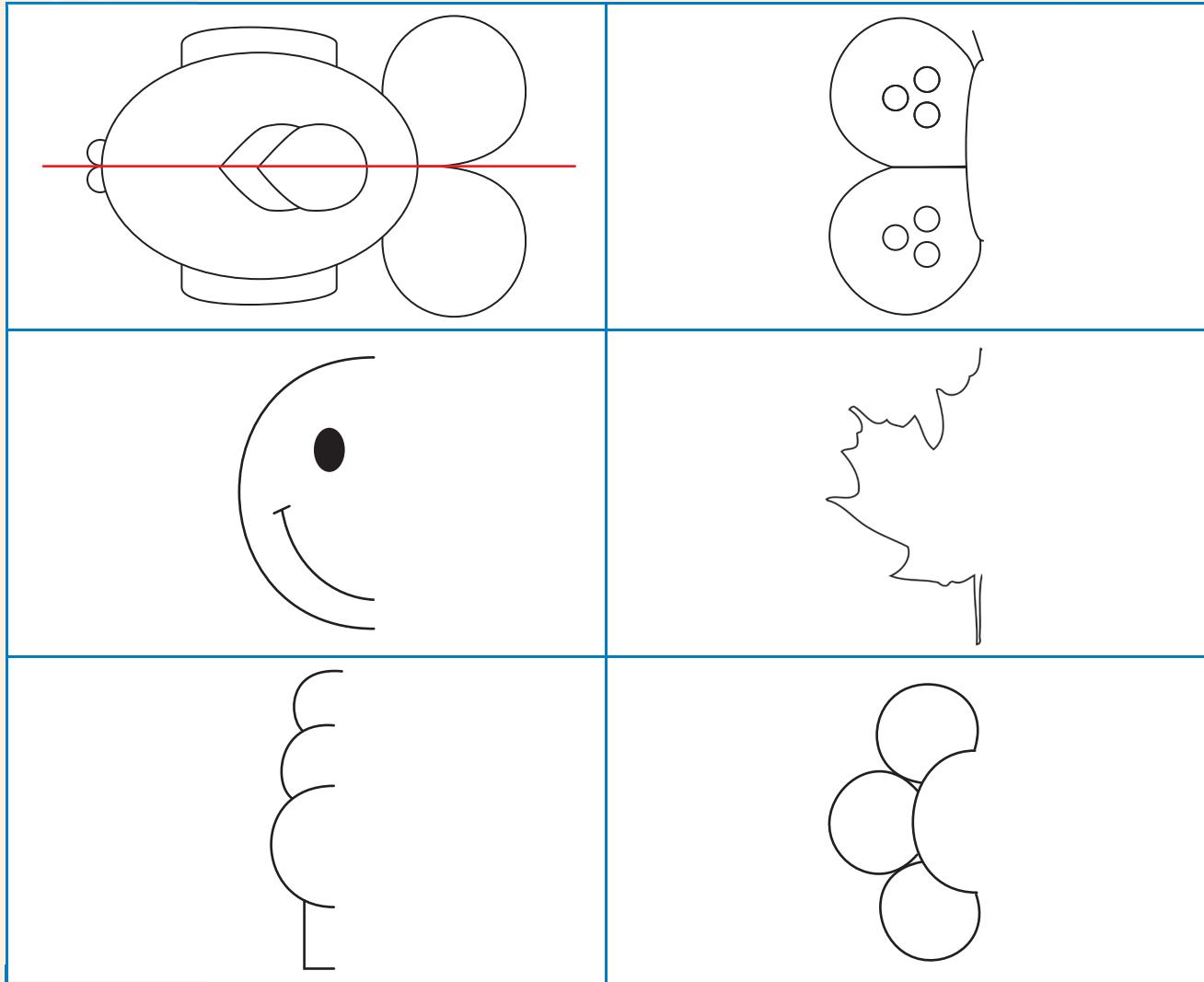


Kopololani zwivhumbeo, ni kone u tala mutalo wa ndinganahuvhili.

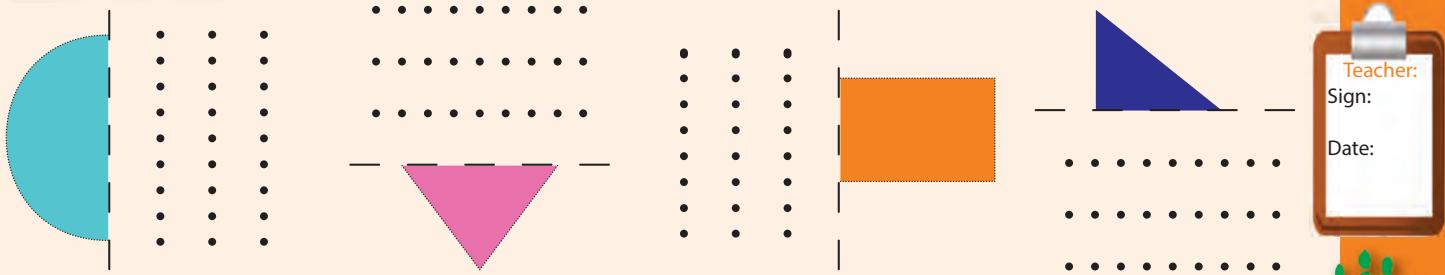




Fhedzisani tshifanyiso nga u ola ila iñwe hafu kokotolo.



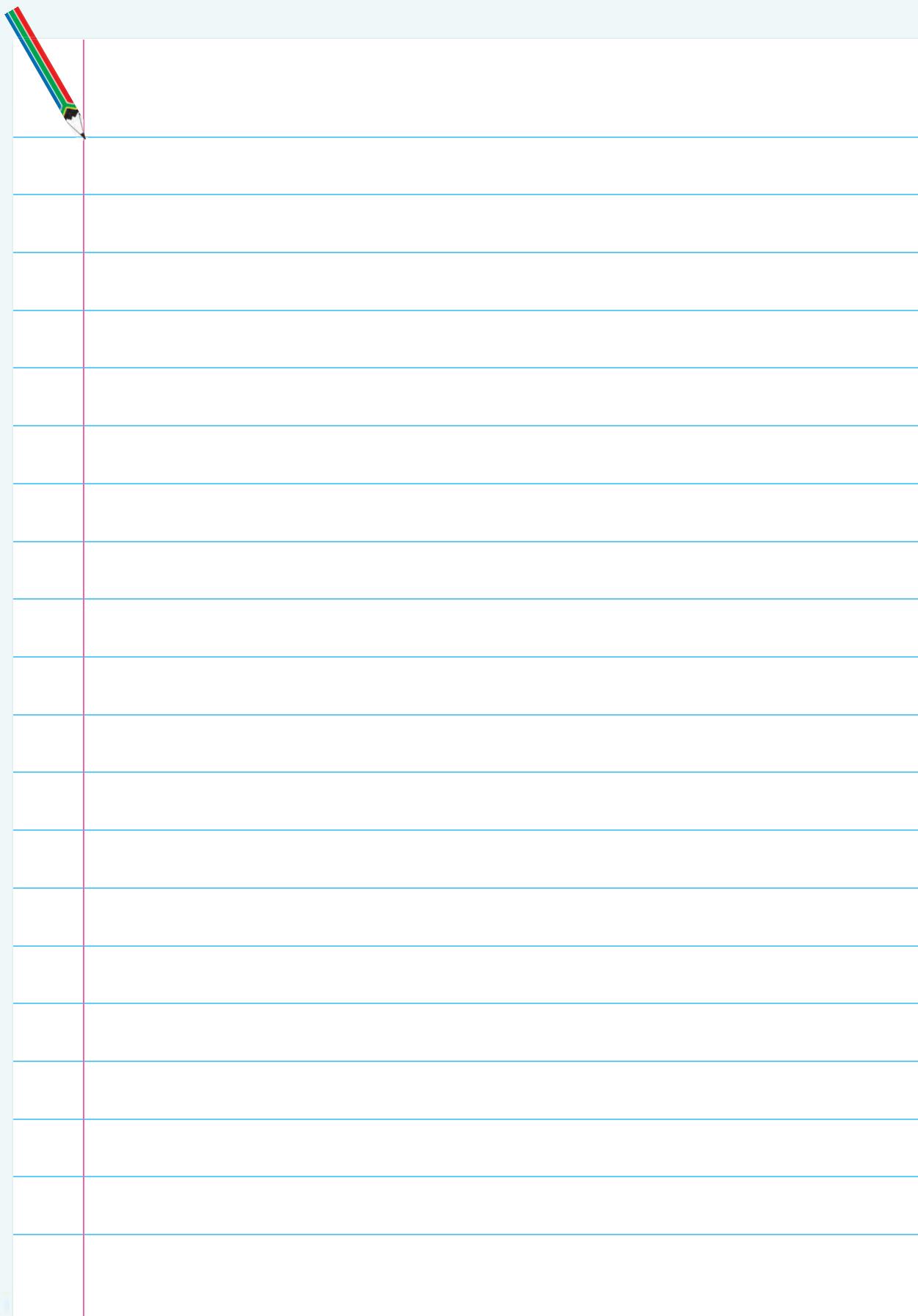
Olani ila iñwe hafu ya tshivhumbeo.



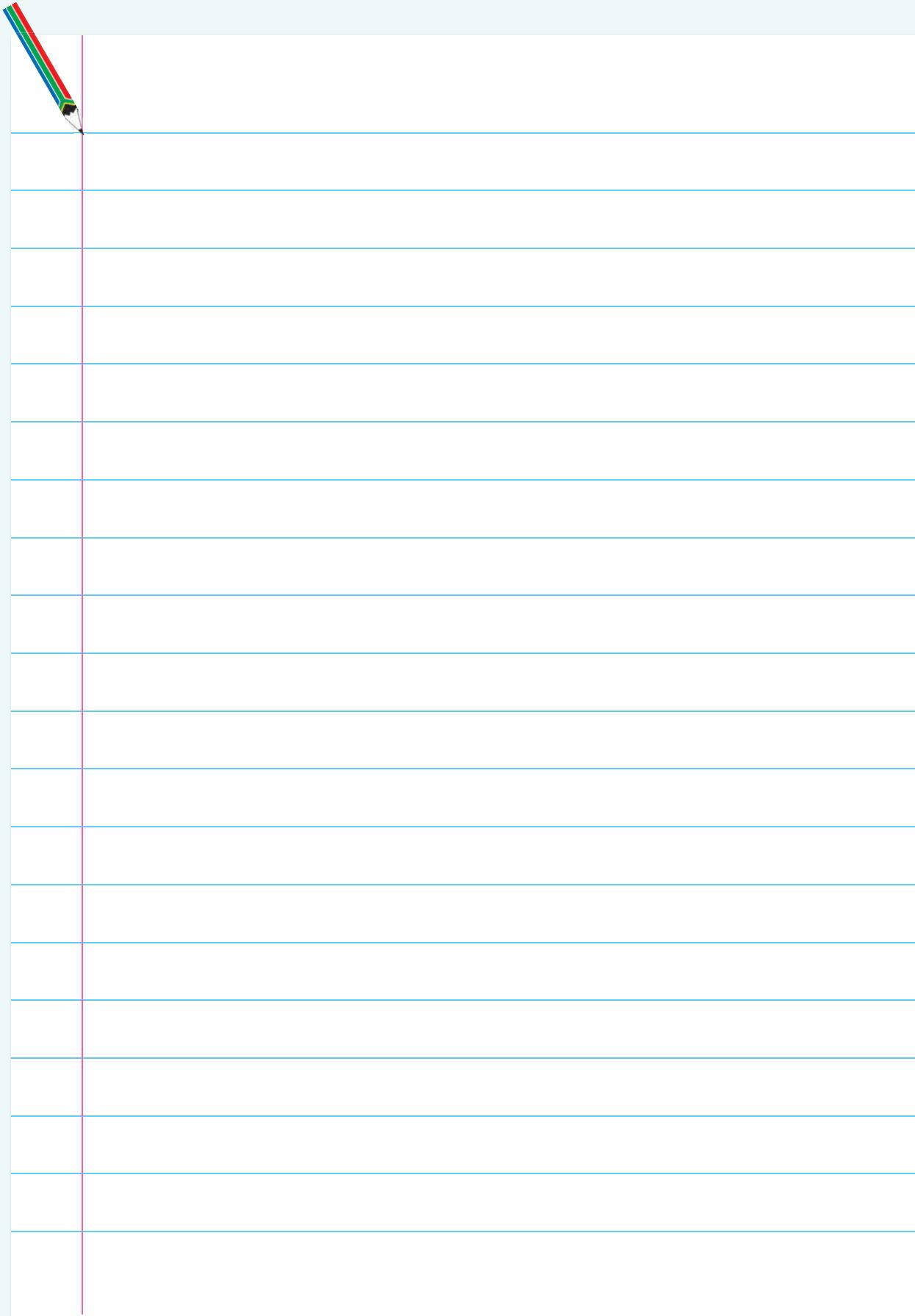
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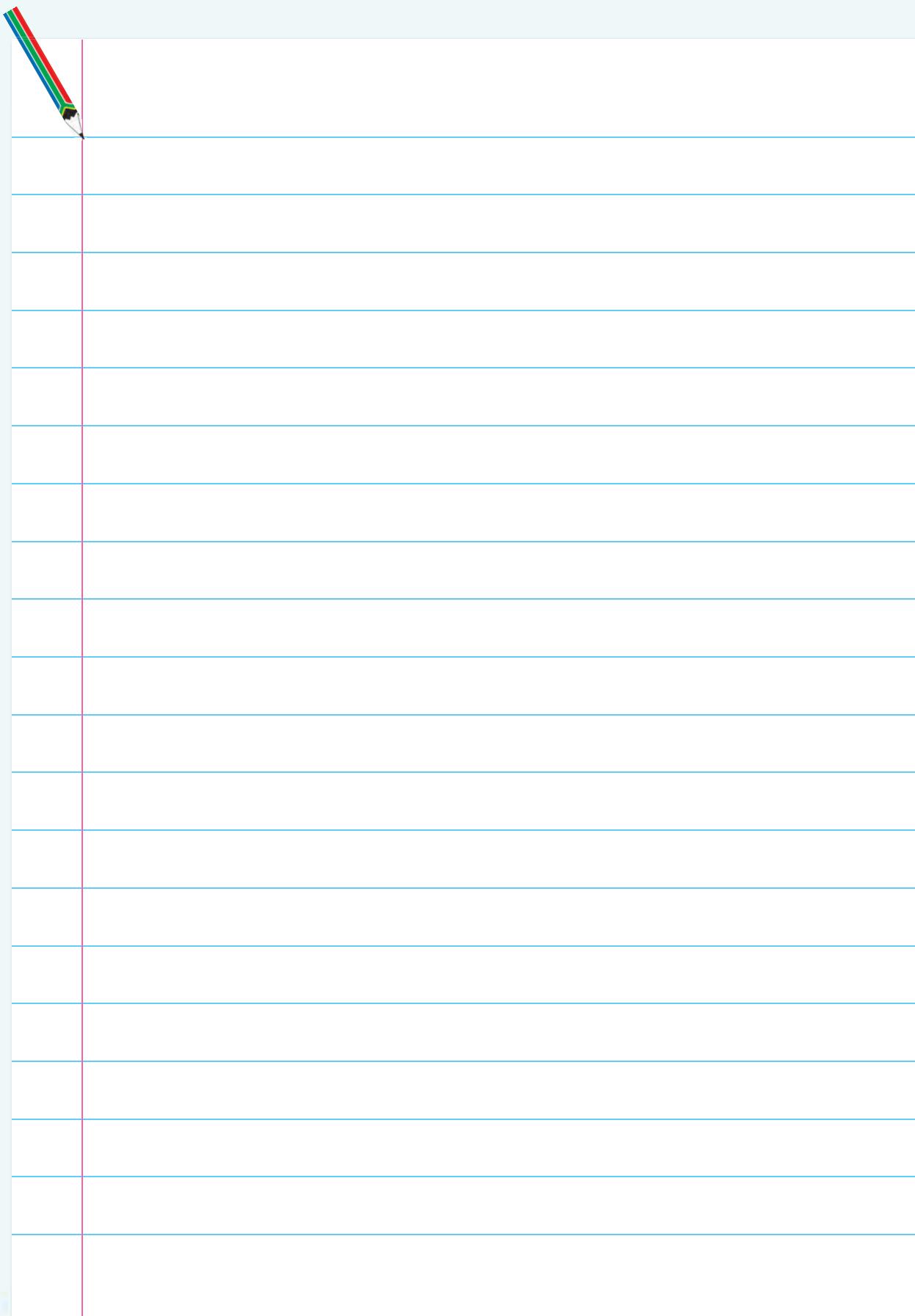
# Notsi



# Notsi

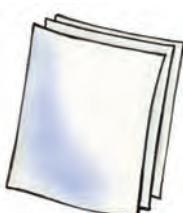
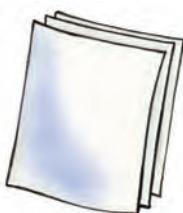
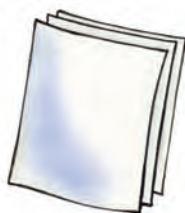
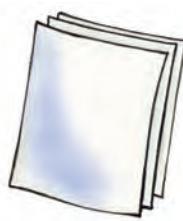


# Notsi



# Cut-out 1

## Worksheet 7q





## Cut out cards 2

## Worksheet 83

| 45 | 50 | 40 | 40 | 30 | 35 |

## Worksheet 84

| 70 | 65 | 75 | 80 | 70 | 60 |

## Worksheet 93

# Worksheet II5

72	78	82	84	86	74	80
76	88	90				

## Worksheet 11q

62	72	64	74	86	66	78	80	68
82	94	86	90	84	96	100		
92	98	88						

