



**basic education**

Department:  
Basic Education  
REPUBLIC OF SOUTH AFRICA

**IIMVAVANYO ZONYAKA NONYAKA KUZWELONKE**

**IBANGA 3**

**IMATHEMATIKA-ISIXHOSA**

**ULUHLU 3: IPHEPHA ELINGUMZEKELO 2012**

## **Isikhokelo sokusebenzisa imizekelo ka-ANA**

### **1. Umbono jikelele**

Uvavanyo lonyaka nonyaka (ANA) luvavanyo oludibeneyo lolwazi nezakhono ezifanele ukuphuhliswa, kubafundi bebanga lo-l ukuya kwele-6 kunye nele-9. Ukuncedisana novavanyo oluqhutywa esikolweni nokuqinisekisa ukuba abafundi bazithemba ngokwaneleyo ukuze bathathe inxaxheba ngempumelelo kwiimviwo zangaphandle, uluhlu lootitshala kunye neencutshe kwizifundo bavelise iimvavanyo eziyimizekelo ezinokusetyenziswa ngootitshala kwizifundo zoLwimi Lwasekhaya neMathematika. Unikwe imibuzo yemizekelo yemvavanyo ethatyathwe kumsebenzi wesikolo wonyaka wekharithulam ukusuka kwikota yokuqala, eyesibini neyesithathu, kunye nesiboniso esipheleleyo sovavanyo (ANA) sebanga ngalinye. Imizekelo yovavanyo equka nesiboniso esipheleleyo soviwo zongeza kuvavanyo oluqhubekayo esikolweni olwenziwa qho kubafundi nekufuneka lungayekwa.

### **2. Unxulumano namanye amacebiso okufunda nokufundisa**

Ngenxa yokubaluleka kokudibanisa eyindlela yokufundisa, eminye imibuzo ekwimizekelo yeemvavanyo inxulunyaniswe neeNcwadi Zomsebenzi ngokwamabanga. Imizekelo yeemvavanyo ilinganiswe neemfuno zekharithulam, kusetyenziswe amaxwebhu ekharithulam i-National Curriculum Statement Grades R-12 (NCS) ne-Curriculum and Assessment Policy Statements (CAPS) kumabanga ngamabanga, kusetyenziswe nendlela yokuhlola esemthethweni (National Protocol for Assessment). La maxwebhu ewonke kunye nalawo isikolo siwanika utitshala ukuze enze amacebiso angawo okunceda utitshala xa elungiselela izifundo kwakunye naxa esenza uvavanyo olusesikweni.

### **3. Unxulumaniso nezinye izixhobo zokufunda nokufundisa**

Ukuze kubekho unxulumano olufanelekileyo, eminye imizekelo yezicatshulwa nemibuzo idityaniswe kwiincwadi zokusebenzela zamabanga ngamabanga ezingqale kumgangatho wabafundi. Le mizekelo ilungelelanisiwe ukuze iqwalasele iimfuneko zeNkcazelo yeKharithulam yeSizwe yamabanga R ukuya ku 12 (NCS), iinjongo zekharithulam, iNkcazelo yePolisi yeKharithulam enxulumene namabanga abafundi kunye nendlela yokuhlola esemthethweni. Yonke le miqulu kwakunye neminye imiqulu enokufumaneka esikolweni izizixhobo ezingundoqo ezinokusetyenziswa ukuncedisa ootitshala njengoko bequlunqa izifundo belawula nohlolo olungundoqo (uhlolo olukhulisayo).

### **4. Isetyenziswa njani imizekelo yovavanyo**

Nangona imizekelo yovavanyo yebanga ngalinye nesifundo ngasinye yenziwe yaza yadityaniswa, utitshala akanyanzelekanga ukuba abafundi abaphendulise ngexesha elinye. Utitshala makakhethe umzekelo onombuzo onxulumene nesifundo asilungiseleleyo. Imibuzo ekhethwe kumzekelo vavanyo okanye iqela lemibuzo enokuphenduleka ngexesha elinye ingasetyenziswa ngokuye kukhula ukufunda nokufundisa ngolu hlobo:

4.1 Ekuqaleni kwesifundo, njengovavanyo lokuqonda nokwahlula izinto abafundi abakwazi ukuzenza/abazaziyo nezo bangakwazi ukuzenza/bangazaziyo. Ukuqonda lo mahluko kukhokhelela ekubeni abafundi bacoselelwe ukufundiswa nokuze kwakhiwe izifundo ezilungele ukulungisa ezo ngxaki banazo baze baphucule ukuqonda. Olu vavanyo lokuqonda lungenziwa umsebenzi wasekhaya ukonga ixesha.

- 4.2 Kwisifundo phakathi, uvavanyo olucwangcisiweyo lusetyenziswa ukuvavanya ukuba ulwazi nezakhono zabafundi ziyaphuhla na. Njengoko isifundo siqhuba lukwasetyenziswa ukuvavanya nokuqinisekisa ukuba akukho mfundi ushiyekayo kwisifundo.
- 4.3 Ukugqibezela isifundo okanye iqela lezifundo uvavanyo oludityanisiweyo luyenziwa ukuvavanya ukuba abafundi bayaqonda kwaye bayakwazi ukusebenzisa ulwazi nezakhono abazifumene kwizifundo. Inkcaza yokuba abafundi baqhube njani mabayinikwe ngoko nangoko, ngelo xesha utitshala wenza isigqibo ngeendawo ezifuna ukuphindwa kwisifundo okanye kwizifundo ukuncedisa ulwazi okanye izakhono ezingaphuhlanga.
- 4.4 Kuwo onke la manqanaba makusetyenziswe iindlela ngeendlela zokubuza, umz. indlela yokuphendula ngokukhetha kwiimpendulo azinikiweyo, imibuzo efuna impendulo yakhe, imibuzo efuna impendulo emfutshane, njalo-njalo.

Nangona uvavanyo lokufumana ukuqonda novavanyo lokwakha ulwazi lusenokuba lufutshane ngokwemibuzo, uvavanyo oludityanisiweyo lunokuquka imibuzo emininzi kuxhomekeka kumsebenzi osele wenziwe. Okubalulekileyo kukuqinisekisa ukuba abafundi baqhelaniswa nendlela yokuphendula uvavanyo olupheleleyo olufana novavanyo lukazwelonke lonyaka nonyaka (ANA).

## **5. Imemorandam okanye iindlela zokuphendula**

Umzekelo wendlela yokuphendula okanye iimpendulo ezilindelekileyo zilungiselelwe kumzekelo wovavanyo. Ootitshala mabakhumbule ukuba imemorandam ayiniki mpendulo igqibeleleyo, Imemorandam inika nje kuphela iimpendulo ezilindelekileyo, ngoko utitshala angamnika umfundi amanqaku ngeempendulo ezahlukeneyo, ezivumelekileyo ezinikwe ngabafundi.

## **6. Ukugutyungelwa kwekharithulam**

Kunyanzelekile ukuba ikharithulam igutyungelwe yonke kwibanga ngalinye. Imizekelo yovavanyo yebanga ngalinye ayimeli ikharithulam, ikhupha nje iisampula zovavanyo lolwazi nezakhono ezibalulekileyo kwaye zezomsebenzi wekota yokuqala ukuya kweyesithathu yonyaka Isantya sokusebenza somsebenzi ekufuneka wenziwe sinikezelwe kumaxwebhu ekharithulam (CAPS DOCUMENTS).

## **7. Ukuphetha**

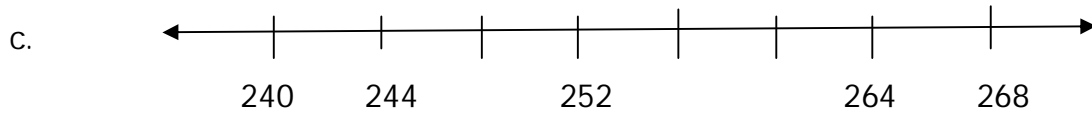
Injongo yeSebe leMfundo kukuphucula nokwakha ezona zisekelo zibalulekileyo, ukufunda nokubala kwabafundi. Uvavanyo lonyaka nonyaka sesinye sezixhobo iSebe leMfundo esisebenzisa ukuqaphela ukuba umgangatho wabafundi uyenyuka, uhleli ndawonye okanye uyehla. Izithili nezikolo kulindeleke ukuba zancedise ootitshala kwaye zidlulise amacebo aluncedo ukuphucula ukufunda nokufundisa ezikolweni. Ngokusebenzisa imizekelo yokuvavanya njengalinye icebiso lokufundisa, ootitshala baza kunceda abafundi baqhelane neendlela nobuchule bokuvavanya. Ukusetyenziswa kwale mizekelo kuya kunceda abafundi bafumane ulwazi olufanelekileyo baze baphuhlise nezakhono ezinxulumene nokufunda ukuze baphucule kuvavanyo lukazwelonke olulandelayo.

# AMANANI, IIPHAREYISHINI NOLWALAMANO

1. Bhala amanani ashiyiweyo kwizithuba ozinikiweyo.

a. 350; 450; \_\_\_\_\_ ; 650; \_\_\_\_\_ ; \_\_\_\_\_ ; 950

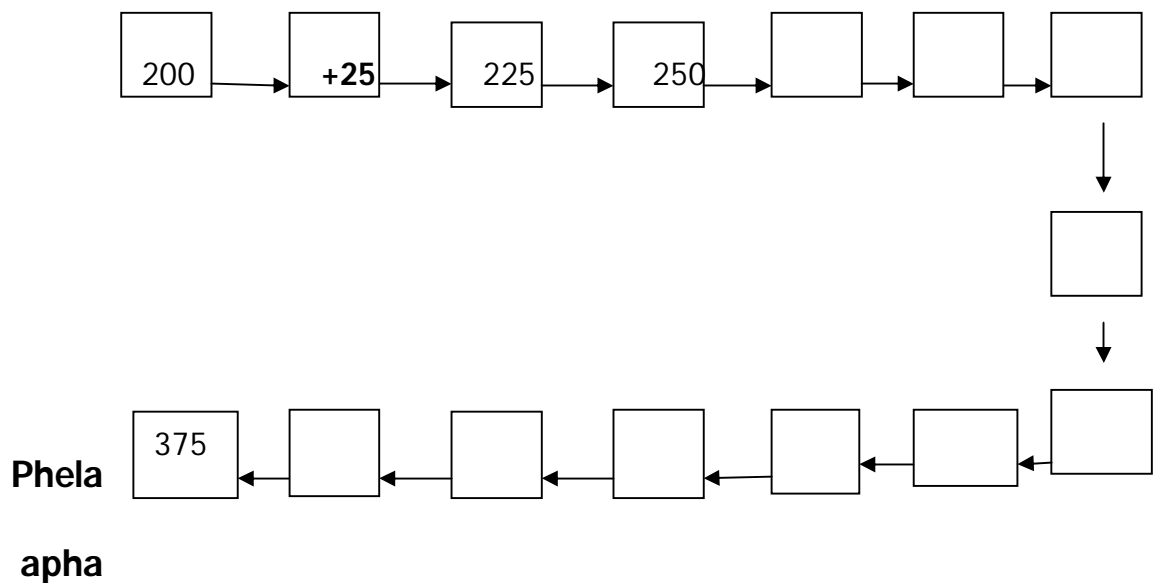
b. 500; \_\_\_\_\_ ; 498; 497; \_\_\_\_\_ ; \_\_\_\_\_ ; 494



2. Gqibezela itheyibhile.

a	50					300		400					650		
b		126	129				141								165
c	498					488					478			472	
d	205				225					250		260			
e		312		310	309				305						299

3. Landela iitola ubhale amanani ashiyiweyo ebhokisini.



4.

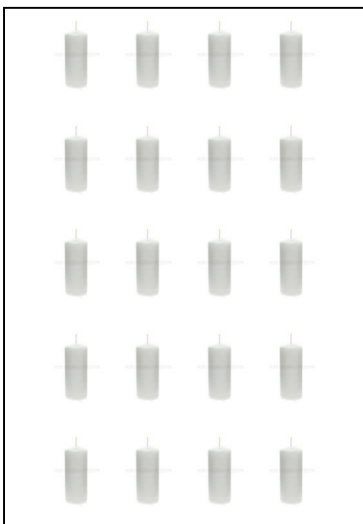


USuzan usebenza kumzi wamakhandlela. Upakisha amakhandlela alishumi.

Amanani amakhandlela apakishwe kwibhokisi ezili 15 =

\_\_\_\_\_.

5. **Jonga amaqela amakhandlela asemfanekisweni uze uphendule imibuzo.**



- 160
- 483
- 361
- 316
- 210

a. Mangaphi amakhandlela kumqolo ngamnye owehlayo?  
\_\_\_\_\_

b. Amakhandlela ewonke emfanekisweni = \_\_\_\_\_

6. **Bhala amanani magama ala manani alandelayo.**

a. 473 \_\_\_\_\_

b. 204 \_\_\_\_\_

7. **Bhala inani kunye negama lenani eliphakathi kuka 268 no 270 .**

a. Inani ngu \_\_\_\_\_.

b. Igama lenani ngu \_\_\_\_\_.

8. **Bhala igama lenani lika 708 \_\_\_\_\_.**

9. **Tshatisa igama lenani kunye nenani ngokuzoba umgca.**

Amakhulu amathathu anamashumi amathandathu ananye

Amakhulu amabini aneshumi

Amakhulu amathathu aneshumi elinesibhozo

Ikhulu elinamashumi amathandathu

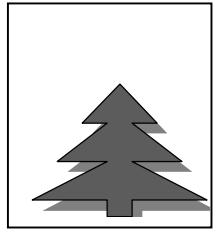
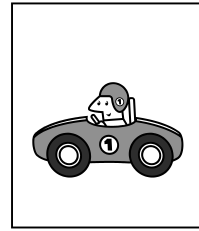
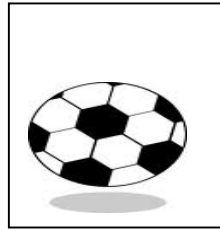
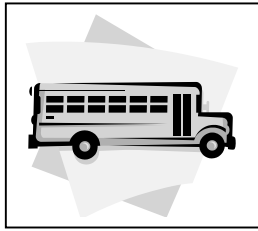
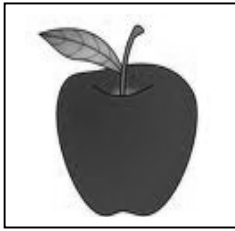
Amakhulu amane anamashumi asibhozo anesithathu

10. **Bhala amanani ngokulandelelana uqale kwelincinci.**

13, 31, 28, 6, 2

---

11.



**Jonga imifanekiso engentla.**

I moto ikweyiphi ibhokisi ukusuka ekhohlo?

I moto ikwibhokisi yesi\_\_\_\_\_ ukusuka ekhohlo.

12. **Fakela u > okanye < ukwenza isivakalisi samanani sibe yinyani.**

a.  $613 \underline{\hspace{1cm}} 731$

b.  $490 \underline{\hspace{1cm}} 290$

c.  $327 \underline{\hspace{1cm}} 732$

13. **Biyela unobumba onempendulo echanekileyo.**

A.  $472 > 742$

B.  $399 < 500 + 99$

C.  $221 = 122$

D.  $749 > 750 - 1$

14. **Bhala amani ukusuka kwelincinci ukuya kwelikhulu.**

a. 631 , 366 , 613 , 376 , 276 , 167 \_\_\_\_\_

b. 742 , 422 , 472 , 727 , 442 , 247 \_\_\_\_\_

15. **Fakela amanani ashayiweyo.**

a.  $673 = \underline{\hspace{2cm}} + 3$

b.  $417 = 410 + \underline{\hspace{2cm}}$

16. **Bhala ixabiso lenani elikrwelelwe umgca.**

a.  $4\underline{7}2$

b.  $2\underline{7}$

17. Ku 694 kukho amashumi angama 69. Yinyani okanye asiyonyani? \_\_\_\_\_

18. **Biyela unobumba onempendulo echanekileyo.** Ku 374, u 3 ixabiso lendawo la ...

a. mashumi

b. makhulu

c. lemivo

19. **Cazulula u 573 ngeendlela ezi 2 ezahlukeneyo.**

$573 = \underline{\hspace{2cm}}$

$573 = \underline{\hspace{2cm}}$



20. **Bhala la magama ashiyiweyo.**

a.  $298 = \square$  amakhulu +  $\square$  amashumi +  $\square$  imivo

b.  $310 = \square + 1 \square + 0 \square$

21. **Tshatisa amanani kunye nekhadi lamanani.**

316	400	1	10
128	200	60	9
411	10	300	6
269	8	20	100

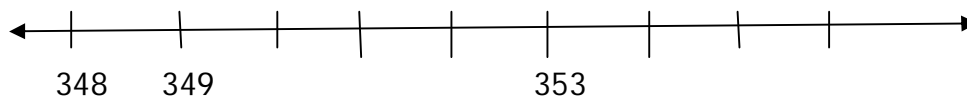
22. **Bhala u10 + 7 + 300 ngendlela elula.**

---

23. **Fakela amanani ashayiweyo.**

	<b>Inani eliphindiweyo</b>	<b>Inani</b>	<b>Isiqingatha senani</b>
a.		150	
b.		84	
c.		21	

24. **Bhala u 352 kwindawo efanelekileyo kumgca manani.**



25. **Sondeza kwishumi elikufutshae.**

a.  $62 =$  \_\_\_\_\_ kwishumi elikufutshane.

b.  $127 =$  \_\_\_\_\_ kwishumi elikufutshane.

26. Utitshala ucele abafundi ukuba baqokelele iziciko zeebhotile ngempela veki. USassy uqokelele ama 619 waze u Lebo waqokelele i 125.

**Zingaphi iziciko bhotile eziqokelelwe ngu Sassy no Lebo zizonke?**

27. UAnna neetshomi zakhe ezi 3 baqokelele izitampu ukudlala umdlalo. Emnye uqokelele izitampu ezingama 23.

**Zingaphi izitampu abaziqokeleleyo zizonke?**

28. Utitshala uze neebhisikithi ezingama 45 esikolweni. Ufuna ukunika abafundi aba 4 iibhisikithi ngokulinganayo abafika ngexesha esikolweni.

**Umfundi omnye uza kufumana iibhisikithi ezingaphi?**

29. Yahlula amapetyu angama 68 ngokulinganayo phakathi kuka Themba nomhlobo wakhe.

**Emnye uza kufumana amapetyu amangaphi?**

30. Abahlobo abathathu bathenge iilekese ezingama 35 bazahlule ngokulinganayo phakathi kwabo.

**Emnye uza kufumana ezingaphi?**

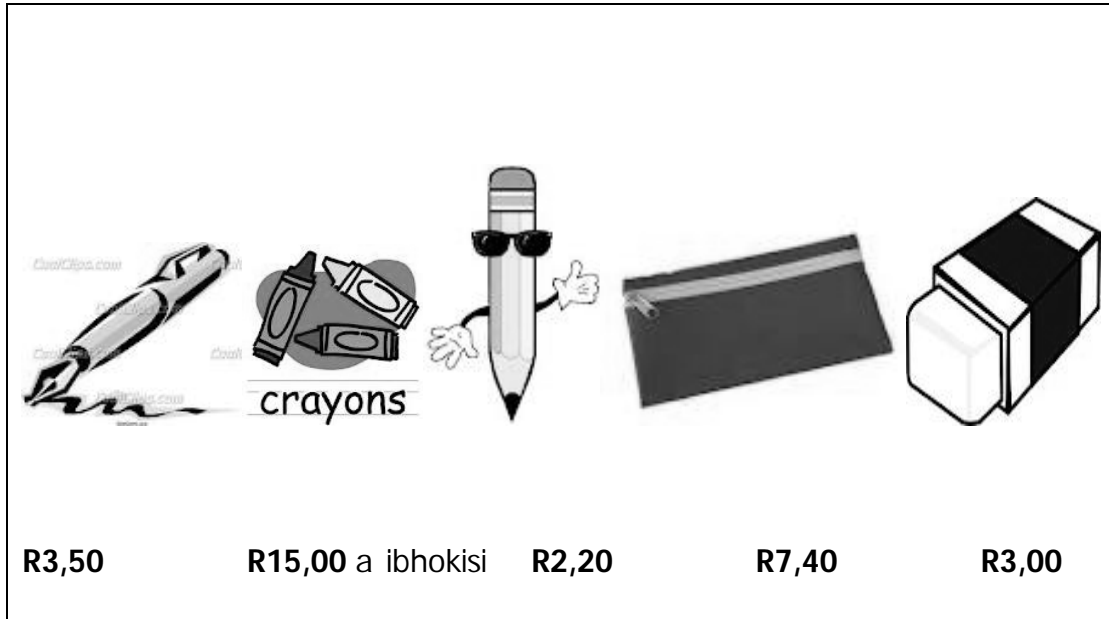
31. UVera unamapetyu ali 125. UBusi unamapetyu ambalwa ngo 82 kwakaVera.

**Mangaphi amapetyu ka Busi?**

32. Kwindawo yokumisa imoto kwa Shoprite kukho iimoto ezingama 21.

**Mangaphi amavili ewonke edibene namavili okuqhuba**

33. Sebenzisa la maxabiso ukuphendula imibuzo.



- a. Yintoni umahluko phakathi kwexabiso lepeni nexabiso lepensile? \_\_\_\_\_
- b. USanie uthenge iipen ezi 2, ipensile, irabha kunye nebegi yeepensile. Usebenzise malini?
- c. Utitshala ufuna ukuthenga iibhokisi ezi 2 zeekhrayoni, Iipeni ezi 2 neepensile ezi 2.

**Bala itshintshi aza kuyifumana xa ebhatala nge R50**

- d. UMasa uthenge iibhokisi zeekhrayoni ezingaphi ukuba ubhatele iR60 ngazo?

34. **Gqibezela okulandelayo:**

a.  $763c = R$  \_\_\_\_\_

b.  $207c = R$  \_\_\_\_\_

c.  $579c = R$  \_\_\_\_\_

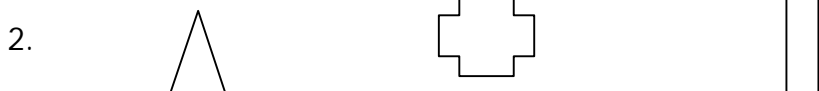
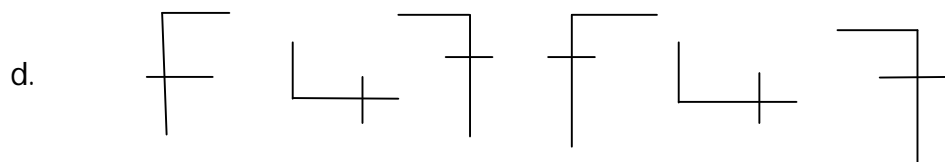
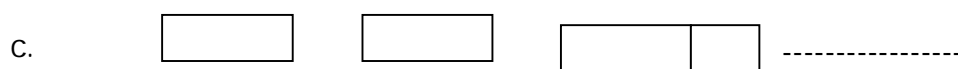
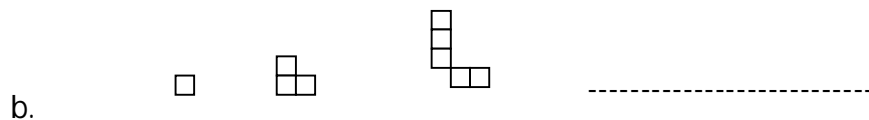
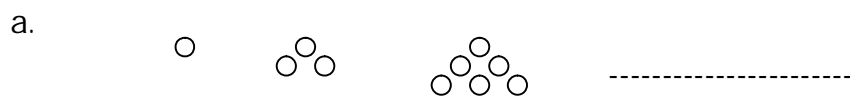
d.  $R2,63 =$  \_\_\_\_\_ c

e.  $R6,15 =$  \_\_\_\_\_ c

f.  $R4,25 =$  \_\_\_\_\_ c

**IIPATHENI, IMISEBENZI KUNYE NEALGEBRA**

1. **Zoba umfanekiso olandelayo kwipatheni nganye.**



**Sebenzisa izimo ezingentla ukwenza eyakho ipatheni.**

**Yiphinde kathathu ipatheni yakho.**

3. **Bhala amanani ama 3 alandelayo.**

a. 526, 527, 528, \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

**Chaza ipatheni ngamazwi akho.**

\_\_\_\_\_

b. **Fakela amanani ashayiweyo kuluhlu lwamanani .**

738, 736, 734, \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , 726

**Chaza ipatheni ngamazwi akho .**

\_\_\_\_\_

4. Umsebenzi ufuna ukupakisha iitoti zesiselo.

I kasi inye inama 25 eetoti zesiselo esibandayo.

**Gqibezela itheyibhile.**

I nani leekasi	1	2	3	4		6
I nani leziselo	25	50		100	125	

5. **Qala ngenani olinikiweyo, yenza eyakho ipatheni uchaze umgaqo owusebenzisileyo .**

a. 330, \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ .

Umgaqo osetyenzisiweyo:

\_\_\_\_\_

b. 504, \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ .

Umgaqo osetyenzisiweyo:

\_\_\_\_\_

## ISITHUBA NESIMO

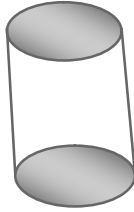
1. **Biyela unobumba onempendulo efanelekileyo.**

Kwezi zinto zilandelayo yeyiphi ikhowuni?

A.



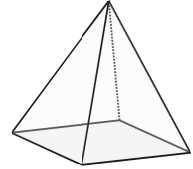
B.



C.

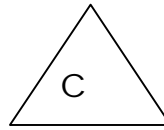
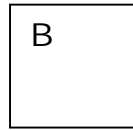
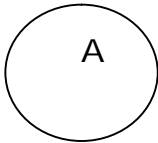


D.

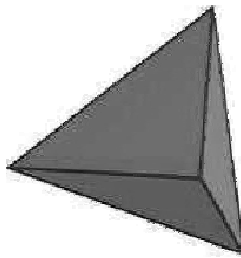


2. **Biyela unobumba onempendulo efanelekileyo.**

Kwezi milo zingamacala amabini zeziphi ezinokusetyenziswa ukwenza iphiramidi esekwe kwisikweri?






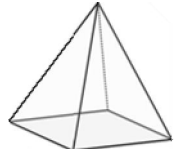
3. **Jonga umfanekiso uze uphendule imibuzo elandelayo.**



a. Yintoni igama lalo mfanekiso unamacala amathathu? \_\_\_\_\_

b. Bungaphi ubuso bale milo inamacala amathathu? \_\_\_\_\_

4. Zoba umgca ukutshatisa imilo kunye negama layo

	iphiramidi
	ikhowuni
	Iprizim eluxande
	isilinda



## UMLINGANISELO

### 1. Sibenzisa ntoni ukulinganisa

a. Ubude bencwadi? \_\_\_\_\_

b. Ububanzi bekhasi? \_\_\_\_\_

### 2. Funda ikhalenda uze uphendule imibuzo.



- a. Iinyanga ezineentsuku ezingama 30 \_\_\_\_\_
- b. Iintsuku zonyaka zinga = \_\_\_\_\_
- c. Inani lemigqibelo kuJulayi = \_\_\_\_\_
- d. Inani leveki enyakeni = \_\_\_\_\_
- e. Inani leenyanga enyakeni = \_\_\_\_\_
- f. Inani leentsuku phakathi kwemini yabasebenzi kunye nemini yolutsha = \_\_\_\_\_

3. **Jonga kwikhalenda ekumbuzo 2 ugqibezele itheyibhile.**

Umhla		Iiholide zikawonke wonke eMzantsi Afrika	Usuku ekhalendeni
a	01 Janyuwari 2012	Unyaka omtsha	
b	21 Matshi 2012	Imini yamalungelo oluntu	
c	01 Meyi 2012	Imini yabasebenzi	
d	16 Juni 2012	Imini yolutsha	

4. Iintsuku eziyi 42 zilingana neeveki ezi yi \_\_\_\_\_

5. Iinyanga ezi 4 zilinganane \_\_\_\_\_ yonyaka.

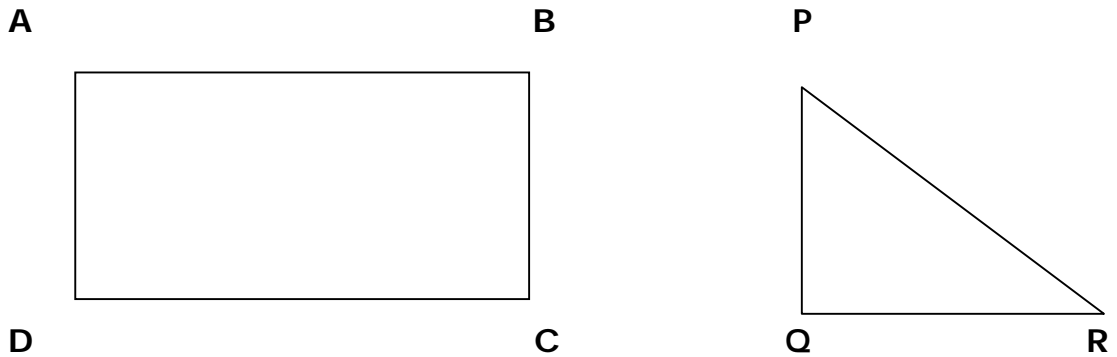
6. **Gqibezela:**

Ukuba usiba olubonisa imizuzu lukhombe ku 10, Lubonisa

\_\_\_\_\_ okanye \_\_\_\_\_

7. Qala uqikelele uze usebenzise irula ukulinganisa ubude becala ngalinye lale mifanekiso ngokweesentimitha.

Bhala impendulo kwitheyibhile.



	amacala	uqikelelo	Oyena mlinganiselo
a	AB		
b	BC		
c	DC		
d	AD		
e	PQ		
f	PR		
g	QR		

8. Bala ubude bubonke kumfanekiso ngamnye kumbuzo 6.

a. Kuxande ABCD, ubude bubonke = \_\_\_\_\_

b. unxantathu PQR, ubude bubonke = \_\_\_\_\_

## UKUSEBENZA NGOLWAZI

1. USammy ubhale ubungakanani bezihlangu zabafundi afunda nabo bebanga lesi 3

Ngolu hlobo:

4	7	7	6	4	5	3	6
7	4	5	3	3	6	7	3
3	5	7	4	6	5	3	4
6	3	4	4	7	4	3	5

Inani labafundi abanxiba u 3 = \_\_\_\_\_

4 = \_\_\_\_\_

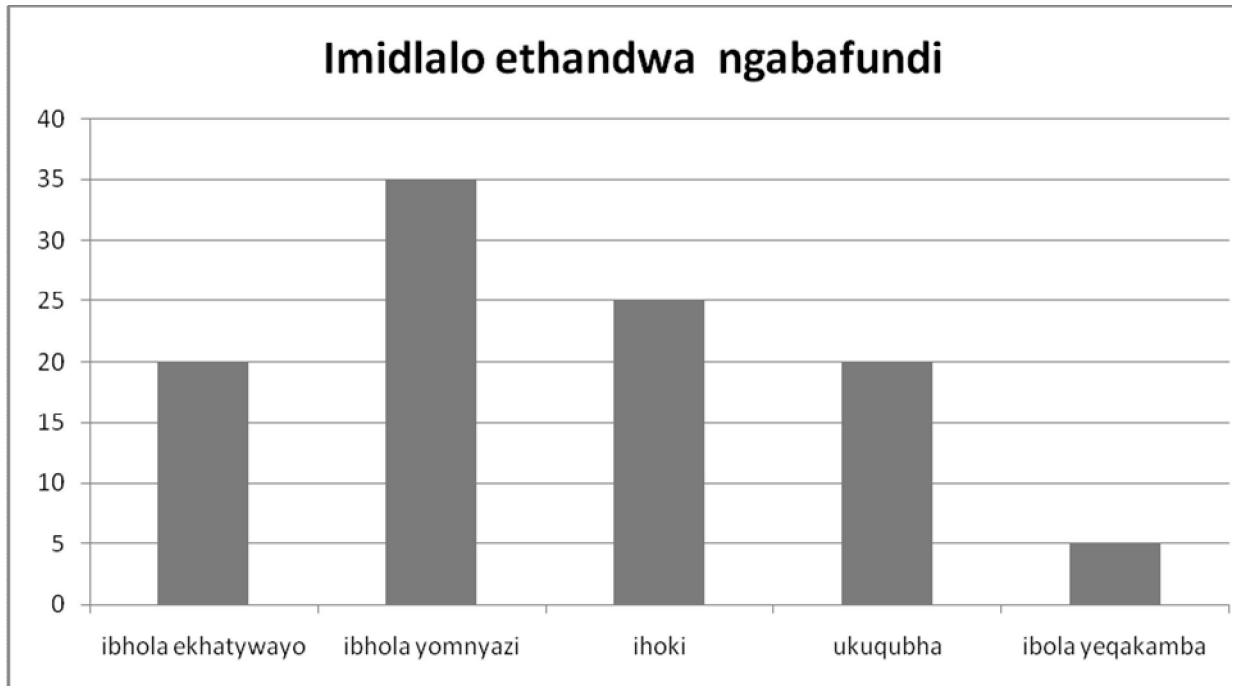
5 = \_\_\_\_\_

6 = \_\_\_\_\_

7 = \_\_\_\_\_

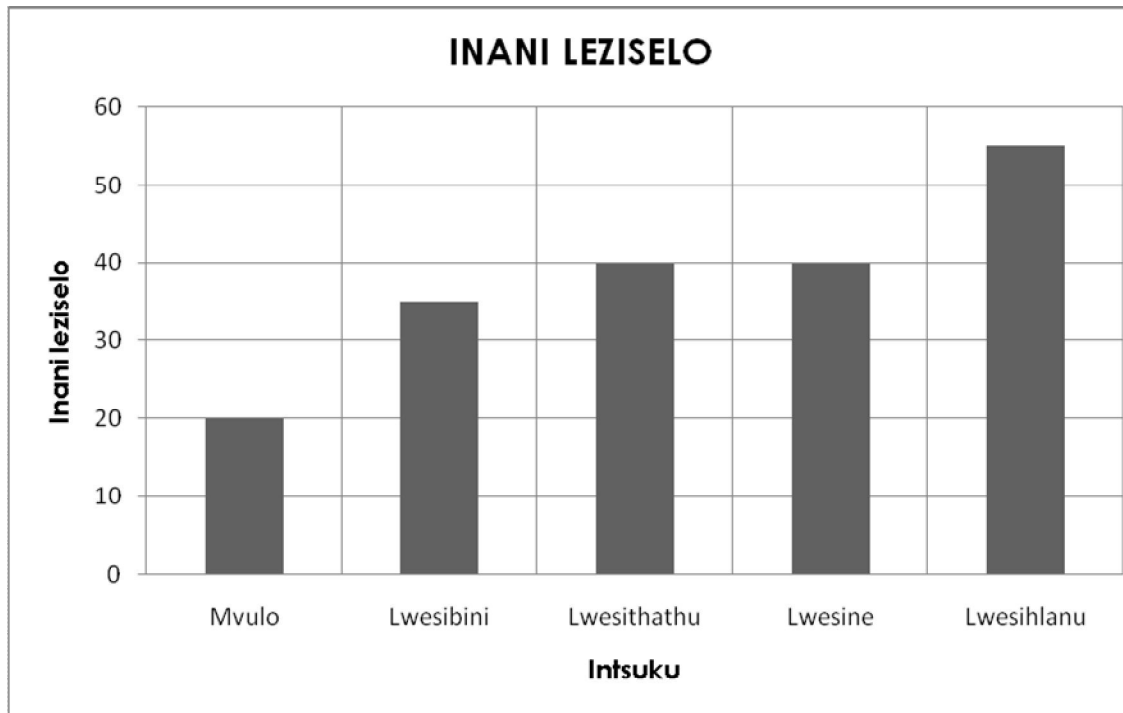
**Zoba igrafu esitena ukubonisa olu lwazi.**

2. Jonga igrafu esisitena engezantsi uze uphendule imibuzo.



- a. Bangaphi abafundi abathanda ihoki? \_\_\_\_\_ .
- b. Inani labafundi abathanda iqakamba \_\_\_\_\_.
- c. Umdlalo othandwa ngabafundi abaninzi \_\_\_\_\_.
- d. Umdlalo othandwa ngabafundi abambalwa \_\_\_\_\_.
- e. Yeyiphi imidlalo emi 2 ethandwa ngabafundi abafanayo?  
\_\_\_\_\_.

3. Le grafu ilandelayo yesitena ibonisa nani leziselo ezithengiswa evenkileni kaSipho ngeveki yesikolo.



- a. Inani leziselo ezithengiswe ngoMvulo = \_\_\_\_\_
- b. Usuku ekuthengiswe kakhulu iziselo \_\_\_\_\_
- c. Inani leziselo ezithengiswe ngoLwesihlanu = \_\_\_\_\_
- d. Lingaphezulu ngabani inani leziselo ezithengiswe ngoLwesihlanu kunezo zithengiswe ngoLwesine? \_\_\_\_\_.