Province of the
EASTERN CAPE
EDUCATION

ISIGABA ESIPHAKATHI

IBANGA 6

NOVEMBA 2016

IMATHEMATIKA

AMANQAKU: 75

IXESHA: 1½ iiyure

IGAMA: _____

6MAXH

Eli phepha lemibuzo linamaphepha ali 13.

IMIYALELO

1.   Funda YONKE imiyalelo ngokugqibeleleyo.

2.   UMBUZO 1 uneempendulo ezikhethayo ozinikiweyo. Biyela unobumba onempendulo echanekileyo.

3.   Phendula UMBUZO 2 ukuya KUMBUZO 27 kwizithuba ozinikiweyo.

4.   Wonke umsebenzi mawenziwe kwiphepha lemibuzo hayi kwiphepha elisecaleni.

5.   Olu viwo lunamanqaku ayi 75.

6.   Olu viwo luthatha ixesha eliyi 1½ yeeyure.

7.   Utitshala uzakuncedisa ukuphendula umbuzo ongumzekelo phambi kokuba uqale uviwo lwakho

8.   Ukusebenzisa ikhaltyhuleyitha AKUVUMELEKANGA.

UMSEBENZI ONGUMZEKELO

Biyela unobumba onempendulo echanekileyo.

Khaltyhuleyitha: 7 × 5 = …

A   12
B   35
C   75
D   57

Uphendule ngokuchanekileyo ukuba ubiyele Ⓑ ngentla.

QHAPHELA:

- Uzakuphendula imibuzo efana nalo uwuphendule ngentla.
- Phendula kangangoko unakho ukuphendula umbuzo ngamnye nokuba awuqinisekanga ngempendulo echanekileyo.
- Bhala phantsi impendulo ocinga ukuba yeyona ichanekileyo uze ugqithele kumbuzo olandelayo.
- Xa uyiphendule yonke imibuzo kwiphepha ngalinye, gqithela kwiphepha elilandelayo.
- Jonga umsebenzi wakho kuphela.

UVIWO LUYAQALA KWIPHEPHA ELILANDELAYO.

1. **IMIBUZO ENEEMPENDULO EZIKHETHWAYO**

    1.1 U 245 499 **xa esondele (rounded off)** kwi **1 000** ekufutshane ngu …?
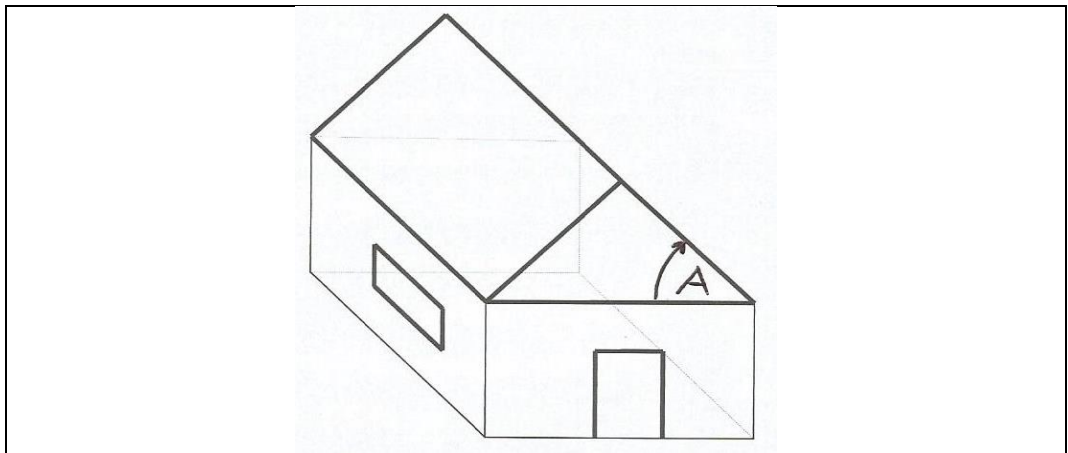
    A 245 000
    B 245 490
    C 245 599
    D 245 500 (1)

    1.2 Khaltyhuleyitha: 74,56 × 100 = …

    A 7 456
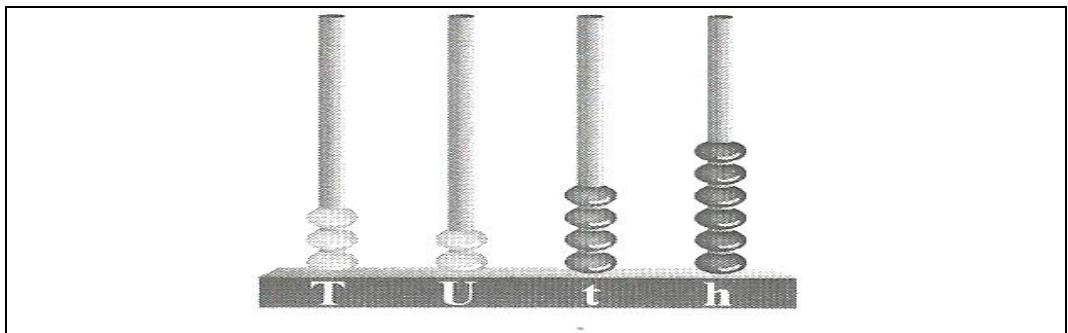   B 7 456
    C 74,56
    D 745,6 (1)

    1.3 Thiya (Name) u **engile A** okwimilo enikwe ngezantsi?

    A I-engile estreyiti (Straight angle)
    B I-engile e-obtyhusi (Obtuse angle)
    C I-engile e-aktyhuti (Acute angle)
    D Irathi e-ngile (Right angle) (1)

    1.4 I-abhakasi (abacus) engezantsi ibonisa …

    A 32,64.
    B 23,45.
    C 32,46.
    D 23,46. (1)

1.5   Khaltyhuleyitha: I $\frac{3}{5}$ ka 150

      A   100
      B   90
      C   120
      D   60   (1)

1.6   Khaltyhuleyitha: Imizuzu eyi 100 ilingana ne …

      A   1 yeyure10 imizuzu.
      B   1 yeyure 40 imizuzu.
      C   1 yeyure 00 imizuzu.
      D   1 yeyure 30 imizuzu.   (1)

1.7   Ukuba u 384 ÷ 16 = 2 × **t**, ngoku u **t** = …

      A   32.
      B   48.
      C   16.
      D   12.   (1)
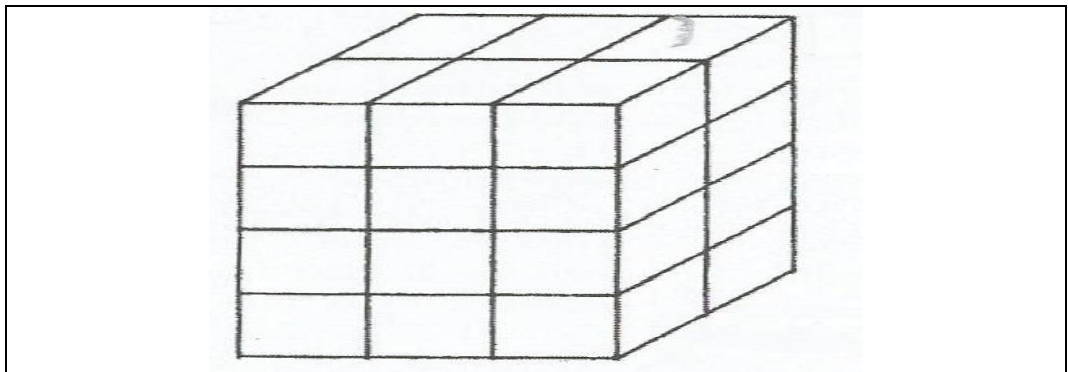
1.8   Inani elilandelayo **kulandelelwano (sequence)   3; 9; 27;** … iyakuba ngu …

      A   125.
      B   36.
      C   81.
      D   30.   (1)

1.9   **Iileya ezine (Four layers)** zeblokho eyi 1 cm³ zisetyenziswe ukwenza **iprizim yerekthengile (rectangular prism)** engezantsi.
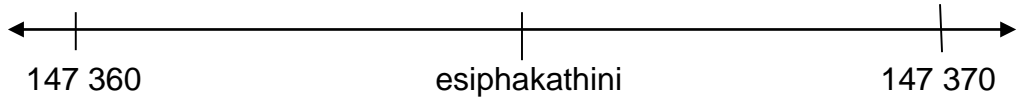

      Zingaphi ii 1 cm³ zeeblokho ezikhoyo kwiprizim yerekthengile iphelele?

      A   26
      B   12
      C   24
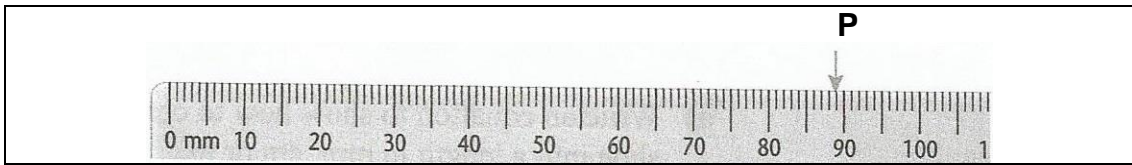   D   30   (1)

1.10	Leliphi inani kumgca manani **elisesiphakathini** (**halfway**) ku 147 360 no 147 370?

A	147 375
B	147 385
C	147 365
D	147 355						(1)
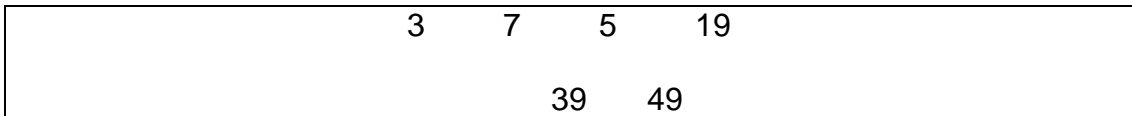
2.	Fakela isikali (scale reading) esiboniswe **kwitolo P**.

P = _____			(1)

3.	Qwalasela idayagram engezantsi uze uphendule umbuzo olandelayo:

3	7	5	19
	39	49	

Bhala inani eliyi**fektha** (**factor)** ka 9:			_____		(1)

4.	Abasebenzi basefama bavune amapere ayi 324 587 kusasa. Emva kwesidlo sasemini bavuna amapere amaninzi. Ekupheleni kwemini babesebevune amapere ayi 866 463.

Mangaphi amapere abawavune emva kwesidlo sasemini?

_____

_____

_____

_____						(2)

5.	UJohn noXhanti kunye noPiet bangenele ukhuphiswano lweembaleki lwezikolo. UJohn ubaleke i10,72 yemizuzwana, uXhanti wabaleka i10,7 yemizuzwana waze yena uPiet wabaleka i10,07 yemizuzwana.

Ngubani ofike kuqala?

_____						(1)

6. ULindiwe wasebenzisa iR275,95 kumxube wokwenza ikeyiki. UYolanda yena wasebenzisa iR25,50 ngaphezulu kunoLindiwe.

   Ingaba uYolanda wasebenzisa malini?

   _____

   _____ (2)

7. Kubafundi abayi 40 bebanga 6, 5% babengezanga esikolweni ngoMvulo.

   7.1   Yayisithini ipesenti (percentage) yabafundi ababekhona esikolweni ngoMvulo?

      _____

      _____

      _____ (1)

   7.2   Bangaphi abafundi ababekhona esikolweni ngoMvulo?

      _____ (2)

8. Usana lukaAna lwazalwa linobunzima obuyi 3 500 g. Ngomhla walo wokubhiyozela unyaka wokuqala luzelwe (first birthday) ubunzima balo babuyi 9,75 kg.

   Bungakanani ubunzima elibufumeneyo kunyaka walo wokuqala?

   _____

   _____

   _____ (2)

9. Kumthathe i2 yemizuzu 24yemizuzwana uZola ukukwenza i8 yezibalo.

   Kumthatha ixesha elingakanani nge avareji ukwenza isibalo esi1?

   _____

   _____

   _____ (2)

10. ULwando uneminyaka esi 8 ngaphantsi kunoLuleka. Iminyaka yabo xa idibene yiminyaka eyi 34.
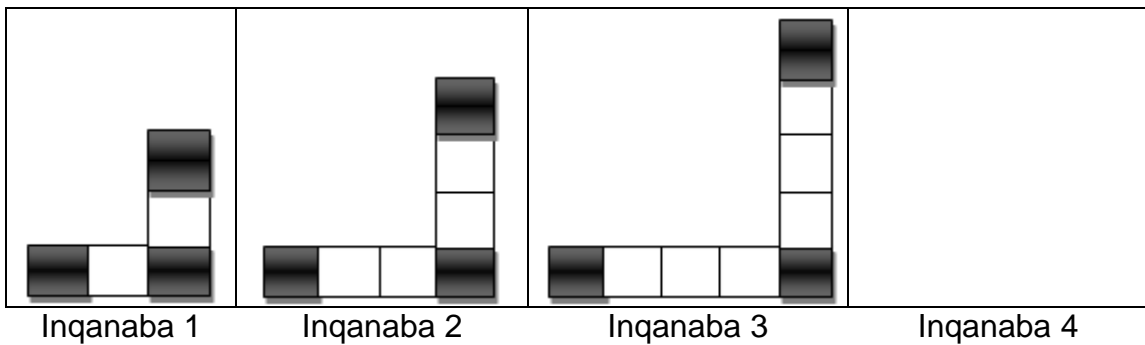
    Mingaphi iminyaka yabo?

    _____

    _____

    _____

    _____ (4)

11. Qwalasela le pateni ilandelayo.

Inqanaba 1   Inqanaba 2   Inqanaba 3   Inqanaba 4

    11.1 Zoba inqanaba 4 kwisithuba esinikiweyo. (1)

    11.2 Chaza umthetho (rule) wale pateni. Sebenzisa awakho amagama.

          _____

          _____ (1)
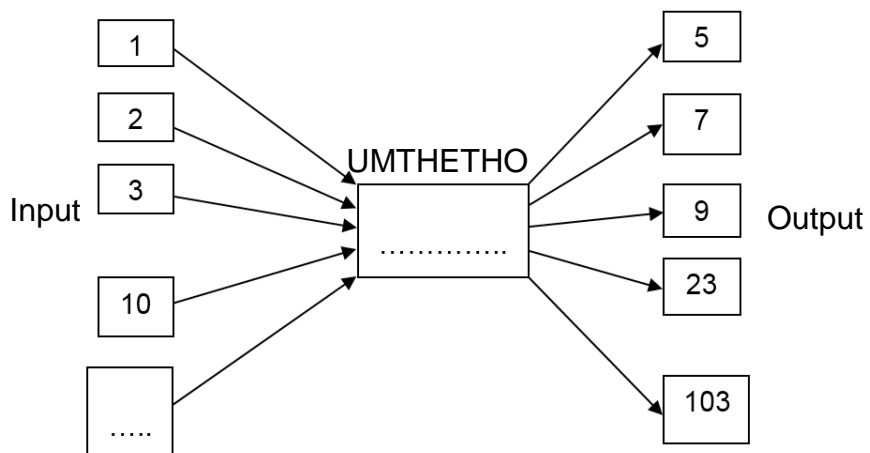
    11.3 Qwalasela umthetho (rule) wale dayagram yeflowu (flow diagram) ilandelayo.

    11.4 Gqibezela isivakalisi samanani (number sentence):

          2 × s + 3 = 33   s = _____ (1)

12 Khaltyhuleyitha:

12.1 19 634 567 + 1 456 369 + 54 603 =…

(2)

12.2 6 − 3,24 = …

(2)

12.3 5 436 × 276 = …

(3)

12.4 45 675 ÷ 145 = …

(2)

13. Abahlobo ababini, uJohn noThabo, bamkela iR400. UThabo usebenza ixesha elide, bagqibe ukuba bayohlule imali ngereyisho (ratio) engu 3:5. Ingaba umntu nganye uyakufumana malini?

(3)

14.	Zonke iintsuku zesikolo uSiphokazi uchitha i ⅓ yosuku esikolweni aze i ¼ yosuku ayichithe ekulaleni. Uchitha i ⅙ ukwenza umsebenzi wasekhaya (homework). Ixesha eliseleyo alohlule ngokulinganayo abukele iTV, azilolongele ukubaleka nokuba atye.
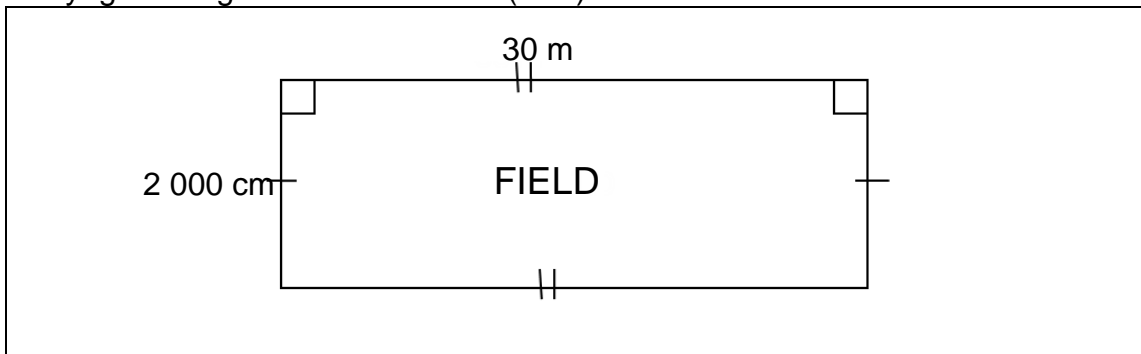
Khaltyhuleyitha:

14.1	Ixesha lilonke alichitha esikolweni nasekulaleni.

(3)

14.2	Inani leeyure alichitha ekwenzeni umsebenzi wasekhaya (homework).

(1)

15.	Idayagram engezantsi imele ibala (field) elincinci.

15.1	Funa **umjikelo (perimeter)** webala elingentla uze impendulo ibekwii mitha (metres).

(1)

15.2	Khaltyhuleyitha ixabiso lwecingo lokubiyela ibala xa imitha nganye iyiR20.
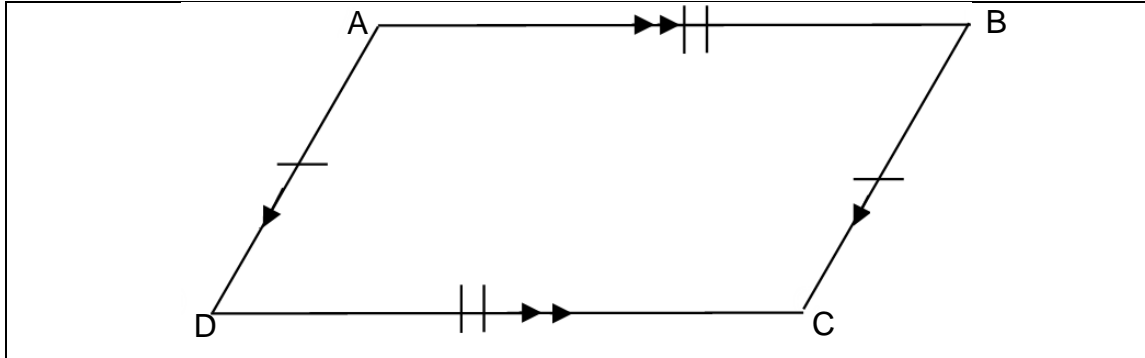
(1)

16. Gqibezela itheyibhile.

Iqhezu eliqhelekileyo (Common fraction)	Iqhezu ledesimali (Decimal fraction)	Ipesenti (Percentage)
½	0,5	50%
_____	0,17	_____
⅛	_____	12,5%

(3)

17 Qwalasela lemilo ingezantsi uze uphendule imibuzo elandelayo.

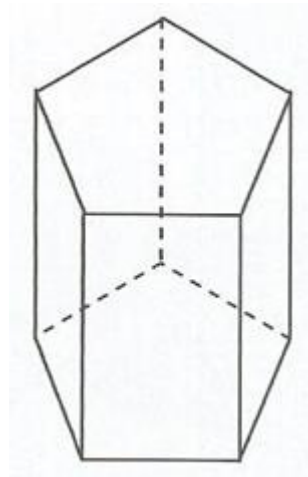17.1   Nika igama lemilo ye 2D engentla. _____ (1)

17.2   Mingaphi imigca yesimetri imilo engentla enayo? _____ (1)

17.3   Ukuba icala $\overrightarrow{AB}$ lingu 6 cm ubude, ingaba icala $\overrightarrow{CD}$ liya kubalide kangakanani?   _____ (1)

18. Gqibezela oku kulandelayo:

Igama lemilo   _____

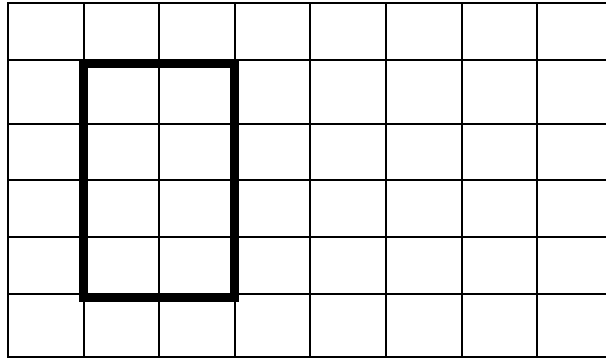Inani leembuso   7

Inani leencam   _____   (2)

19.   Nciphisa (Reduce) ubude becala ngalinye ngefektha (factor) ka 2.

(1)

20.   Chaza **utshintsho (transformation)** olusetyenzisiweyo kwezi pateni
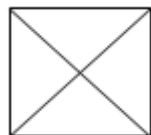   ziboniswe ngezantsi.

_____   (1)

21.   Xela indawo yodibano (point of position).

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						

Itrayengile (triangle) iyakufunyanwa kweyiphi iblokho? _____   (1)

22.   Imigca emibini edayagonal inqamleze isikwere yenza iitrayengile.

Zingaphi iitrayengile zizonke ezenzeke kwisikwere ezingalinganiyo
ngobukhulu?

_____   (2)

23. **Itshati yemozulu A** ne **tshathi yemozulu B** zibonisa amaqondo <u>aphantsi</u> <u>naphezulu</u> (min and max) obushushu amaxesha amabini ohlukeneyo onyaka kwiidolophu ezithile ezinkulu zaseMzantsi Afrika.

Itshati yemozulu A			Itshati yemozulu B		
Pretoria	11 °C	32 °C	Pretoria	-1 °C	18 °C
Bloemfontein	10 °C	28 °C	Bloemfontein	-3 °C	16 °C
Cape Town	12 °C	29 °C	Cape Town	0 °C	19 °C
Johannesburg	8 °C	30 °C	Johannesburg	-2 °C	20 °C

23.1 U <u>min</u> no <u>max</u> bamele ntoni?

_____

_____

_____ (2)

23.2 Yeyiphi **itshati yemozulu** ebonisa amaqondo obushushu asehlotyeni? Nika izizathu zempendulo yakho.

_____

_____

_____

_____ (2)

24. USisipho unebhegi eneebhola ezinemibala ezintandathu:

1 ibhola eluhlaza; 2 iibhola ezibomvu ne 3 yeebhola ezimthubi.

Ufake isandla sakhe ngaphakathi ebhegini waza wakhupha ibhola.

Lingakanani ithuba lokuba angakhupha ibhola ebomvu? Bhala impendulo yakho ngeyona mo (hlobo) ilula yeqhezu (simplest fraction form).

_____

_____

_____

_____ (1)

25. Gqibezela letheybhule ilandelayo ingezantsi ngokuvala izithuba ezishiyiweyo.

Ibanga	Iimpawu zethali (Tally marks)	Ifrikwensi (Frequency)
6a	_____	9
6b	̶H̶I̶I̶ I	6
6c	IIII	4
6d	I	1

(1)

26. Abafundi babe nezi ziphumo zilandelayo kuviwo lweMathematika.
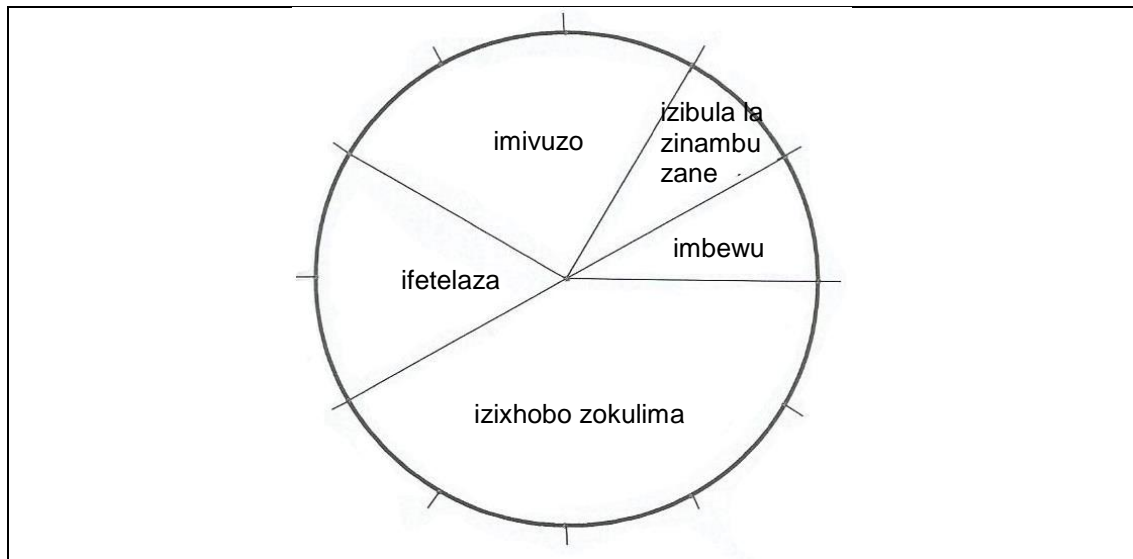
84%   69%   50%   70%   75%   72%

Qwalasela i**median** yeziphumo zabo.   Median: _____   (1)

27. Itshati yephayi (pie chart) engezantsi ibonisa inkcitho yonyaka yomfama wombona kwifama yakhe.
Isanqa (circle) sahlulwe kayi 12 ngokulinganayo.
Qwalasela igrafu uze uphendule imibuzo elandelayo.

Qaphela. Bhala iqhezu ngeyona mo ilula (simplest form).

27.1 Ithini ipesenti yenkcitho yemivuzo?

_____   (1)

27.2 Lithini iqhezu lwenkcitho yembewu?

_____   (1)

27.3 Ukuba inkcitho iyonke yaba yi R480 000, khaltyhuleyitha ukuba yimalini eyachithwa kwizibulali zinambuzane.

_____   (2)

AMANQAKU EWONKE: 75