



Province of the
EASTERN CAPE
EDUCATION

IBAKALA ELIPHAKATHI

IBANGA 6

NOVEMBA 2017

IMATHEMATIKA

AMANQAKU: 75

IXESHA: 1½ iiyure

IGAMA: _____



Eli phepha lemibuzo linamaphepha ali16.

IMIYALELO KUMFUNDI

1. Funda YONKE imiyalelo ngokugqibeleleyo.
2. UMBUZO 1 unemibuzo eli 10 yeempendulo ezikhethwayo ozinikiweyo. Biyela unobumba wempendulo echanekileyo.
3. Phendula UMBUZO 2 ukuya ku22 kwizithuba okanye kwiifreyim ozinikiweyo.
4. Wonke umsebenzi mawenziwe kwiphepha lemibuzo hayi kwiphepha elisecaleni.
5. Olu viwo lunamanqaku angama 75.
6. Olu viwo luthatha ixesha eliyi $1\frac{1}{2}$ yeeyure.
7. Utitshala uzakuncedisa ukuphendula umbuzo ongumzekelo wokuzilungiselela phambi kokuba uqale uviwo lwakho.
8. Awuvumelekanga ukusebenzisa ikhalityhuleyitha.

UMBUZO ONGUMZEKELO WOKUZILUNGISELELA

Biyela unobumba wempendulo echanekileyo.

$$\frac{1}{2} \times 14 = \dots$$

- A 28
- B 14
- C 7
- D 2

Uphendule kakuhle ukuba ubiyele u (C) ngentla.

QAPHELA:

- Uza kuphendula imibuzo emininzi ngolu hlobo ugqiba kuphendula ngalo.
- Yenza kangangoko unako ukuphendula umbuzo ngamnye nokuba awuqinisekanga ngempendulo.
- Bhala impendulo ocinga ukuba yeyona ichanekileyo uze ugqithele kumbuzo olandelayo.
- Xa ugqibile ukuyiphendula yonke imibuzo ekwiphepha ngalinye, dlulela kwiphepha elilandelayo.
- Jonga kumsebenzi wakho kuphela.

UVAVANYO LUYAQALA KWIPHEPHA ELILANDELAYO.

1. **Biyela unobumba** wempendulo echanekileyo.

1.1 Yeyiphi kwezilandelayo eyiseti **yeepraymu namba (prime numbers)** ezintlanu zokuqala?

- A 1; 3; 5; 7; 9
- B 2; 3; 5; 7; 9
- C 2; 3; 5; 7; 11
- D 2; 4; 6; 8; 10

(1)

1.2 Leliphi kula manani eline**fektha 9 (factor 9)**?

- A 72
- B 29
- C 83
- D 56

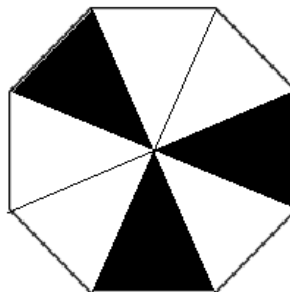
(1)

1.3 Lithini ixabiso (value) ledijithi ekrwelelwe umgca ngaphantsi (underlined digit) ku 43,89?

- A 8 units
- B 8 hundredths
- C 8 tens
- D 8 tenths

(1)

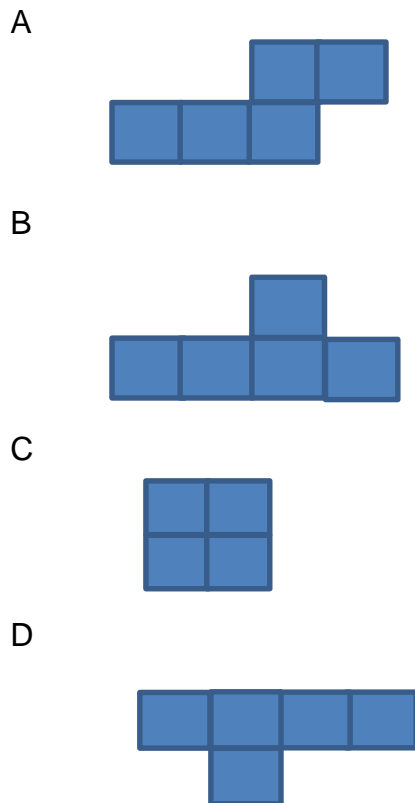
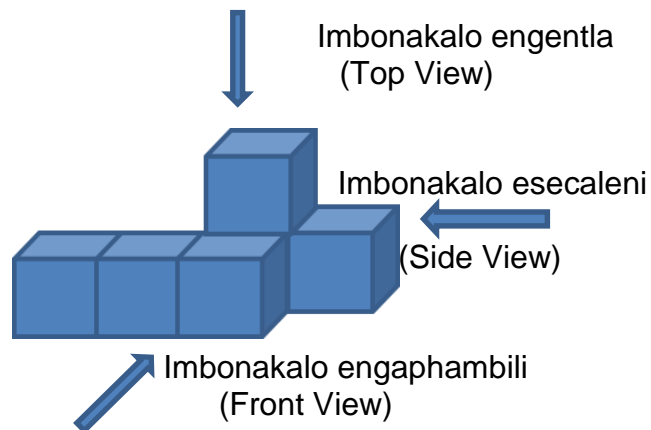
1.4 Liliphi **iqhezu (fraction)** elihlikihliweyo kwidayagram?



- A $\frac{5}{8}$
- B $\frac{3}{8}$
- C $\frac{3}{6}$
- D $\frac{3}{9}$

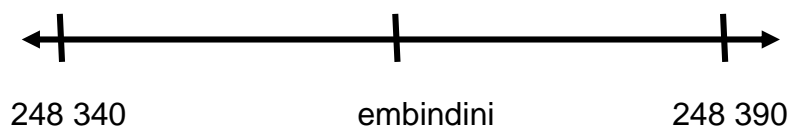
(1)

- 1.5 Sesiphi isiketshi (sketch) esibonisa **imbonakalo engentla (top view)** ye3-D objekthi?



(1)

- 1.6 Leliphi inani kumgca manani ongezantsi elisembindini (**halfway**) phakathi kuka 248 340 no 248 390?



- A 124 185
B 124 170
C 284 745
D 248 365

(1)

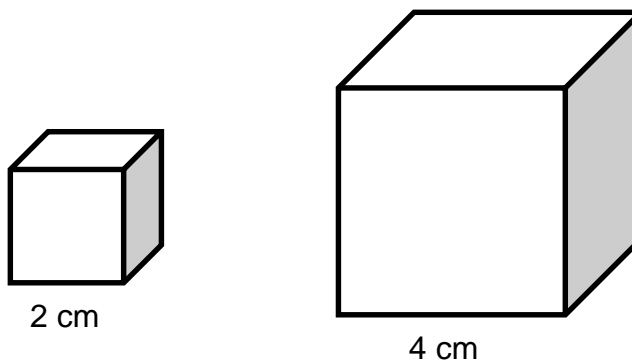
- 1.7 Bhala eli xesha ngokwe **24 yeeyure (24-hour notation)**. Ixesha kusemva kwemini (afternoon).



- A 08:00
- B 13:00
- C 12:00
- D 20:00

(1)

- 1.8 Zingaphi **iityhubhu** ezincinci (small **cubes**) ezingangena ngaphakathi kule tyhubhu inkulu?



- A 2
- B 4
- C 8
- D 16

(1)

- 1.9 Ngubani **imowdi (mode)** yala maqondo obushushu asebusika?

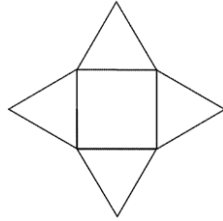
12 °C; 18 °C; 9 °C; 10 °C; 4 °C; 9 °C; 19 °C; 2 °C; 24 °C; 9 °C; 11 °C

- A 9 °C
- B 127 °C
- C 2 °C
- D 12 °C

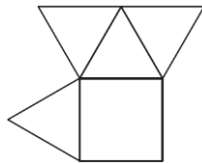
(1)

1.10 Yeyiphi idayagram (diagram) **engenakusetyenziswa** njenge nethi (net) ukwenza **isquare-based pyramid**?

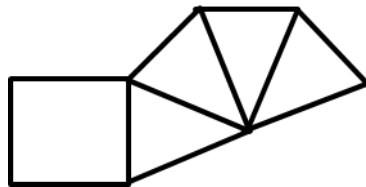
A



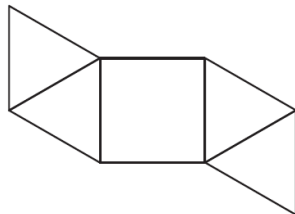
B



C



D



(1)

2. UMrs Jones uhamba umngama oyi180 km ukuya emsebenzini. I 20 km nganye ayihambayo imoto yakhe isebenzisa *4iilitha (4litres)* zepetroli. **Zingaphi iilitha** zepetroli ezisetyenziswa yimoto yakhe **ukuya emsebenzini**?

(3)

3. Sondeza (Round off) u764 386 **kweyona 1 000 ikufutshane (nearest 1 000)**.

(1)

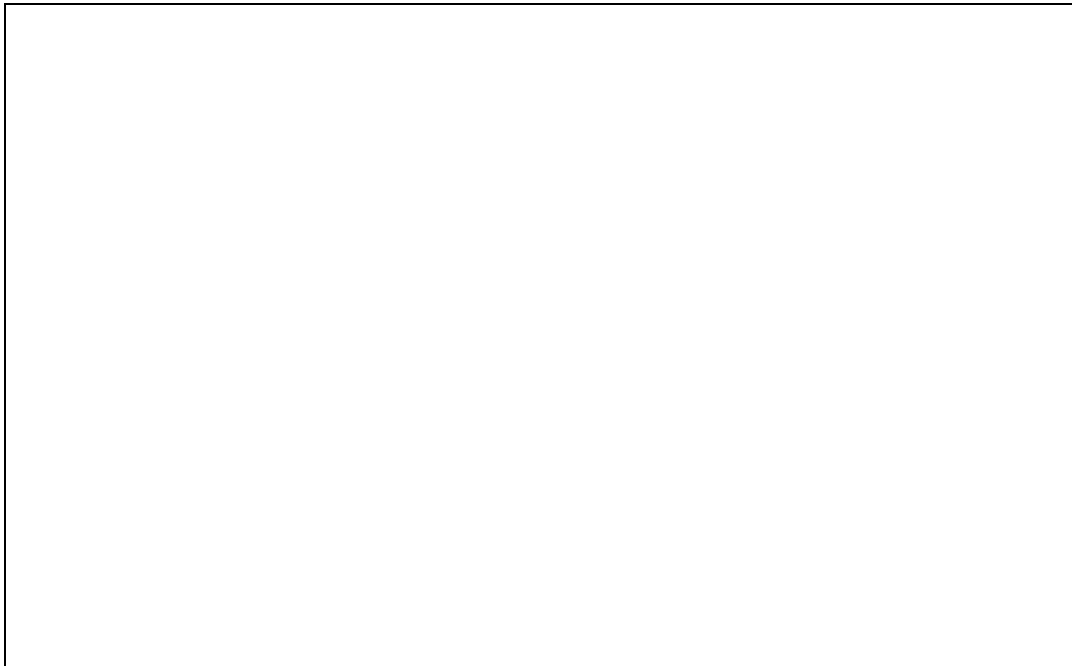
4. Landelanisa (order) la amaqhezu aqhelekileyo (common fractions) alandelayo ukusuka **kwelona lincinci ukuya kwelona likhulu (smallest to the biggest)**.

$$\frac{1}{2}; \frac{2}{5}; \frac{2}{3}; \frac{1}{4}$$



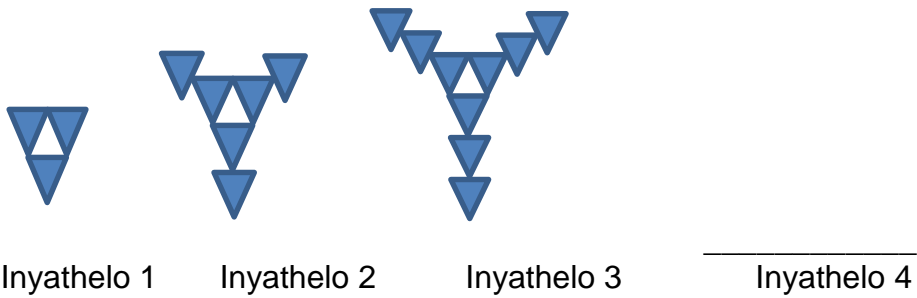
(2)

5. UMnu. Tom uneenkomo ezili124. Wabe ilifa lakhe ukuba **isiqongatha (half)** seenkomo zakhe ize inikwe inkosikazi yakhe ze **ikota (quarter)** inikwe unyana wakhe. Intombi yakhe yona ifumane ezishiyekileyo. Zingaphi iinkomo ezifumanayo intombi yakhe?



(3)

6. **Ipateni (pattern)** enikwe ngezantsi:



Inyathelo	1	2	3		10		6.3.2 ____
litrayengile ezihlikhiweyo	3	6	9		6.3.1 ____		300

6.1 Zoba inyathelo **4** kwipateni. (1)

6.2 Chaza **umthetho (rule)** wale pateni usebenzise awakho amazwi.

(2)

6.3 **Gqibezela** itheyibhule engentla. (2)

7. **Bala:**

$$567,38 - 197,2$$

(1)

8. **Bala** iimpendulo zemibuzo 8.1 ukuya ku 8.6.

8.1 $456\,954 + 364\,637 =$

(2)

8.2 $639\,742 - 520\,834 =$

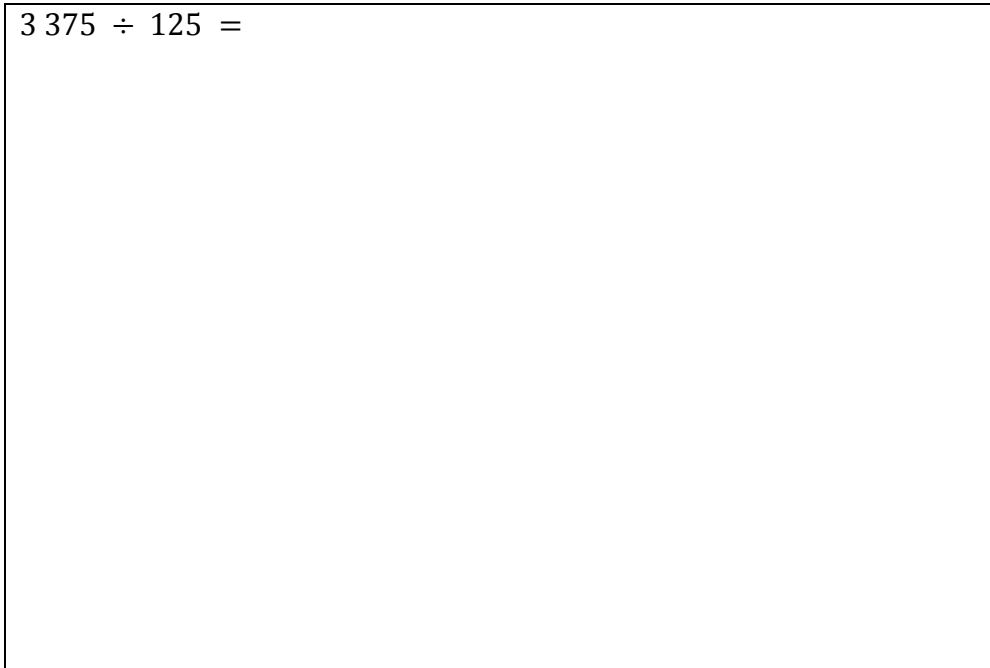
(2)

8.3 $2\,359 \times 275 =$

(3)

8.4


$$3\,375 \div 125 =$$



(3)

8.5

Bala: $3\frac{3}{4} + 5\frac{1}{2} - 3\frac{3}{8}$

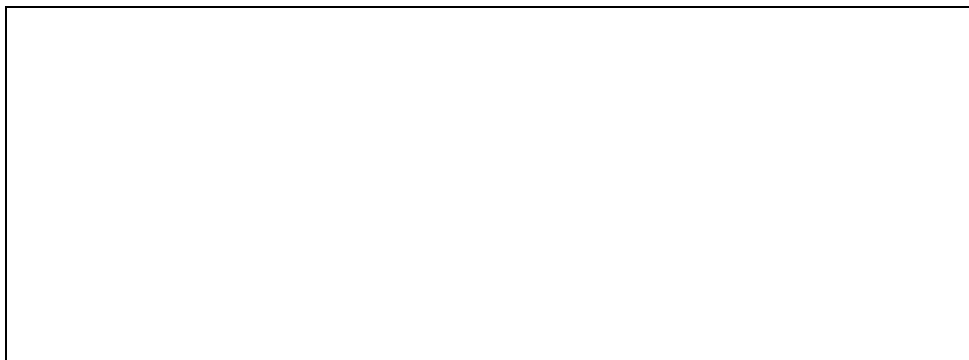


(3)

8.6

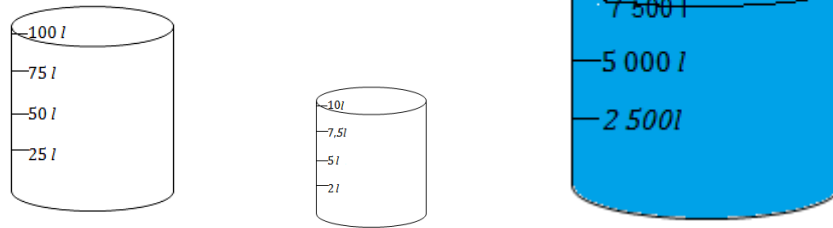
Bala:

$$214 \div 2 \times (14 - 9)$$



(2)

9. Itanki lamanzi lithatha i 10 000l yamanzi xa lizele. Emva kwemvula amanzi etankini abayi 7 500 l.



- 9.1 Ungakanani umthamo (capacity) wetanki ngee *kl*?

(1)

- 9.2 Kufuneka ugqwalise i25 yezikhongozeli ezinomthamo oyi 100 l ngamanzi. Kufuneka usebenzise isikhongozeli esiyi 10 l ukukha amanzi kwitanki eliyi 10 000 l.

- 9.2.1 Uyakukha amaxesha amangaphi usebenzisa isikhongozeli esiyi 10 l ukugqwalisa isikhongozeli esiyi 100 l?

(2)

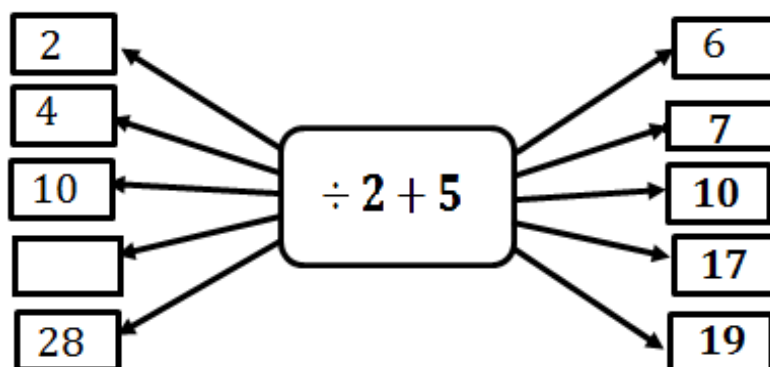
- 9.2.2 Zingaphi ilitha zamanzi zizonke ezikhiwe etankini ukugqwalisa i25 yezikhongozeli eziyi 100 l?

(2)

10. Ibanga lesithandathu linabafundi abangama 40. Irekisho (ratio) yamantombazana kumakhwenkwe yi 5: 3. Mangaphi amantombazana kweli banga?

(3)

11. Gqibezela iflowu dayagram:



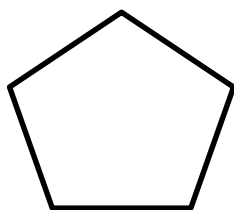
(1)

12. Gqibezela isivakalisi esilandelayo:

I 2 kg yeswekile inobunzima (mass) obulinganayo ngqo ne _____ g yeswekile.

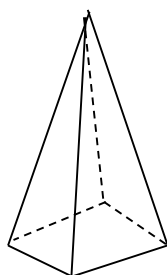
(1)

13. Mingaphi imigca yesimetri (lines of symmetry) kule 2D objekthi ilandelayo?



(1)

14. Phendula imibuzo elandelayo malunga ne-objekthi enikiweyo.



14.1 Igama le 3D objekthi: _____

(1)

14.2 Inani leembuso (faces): _____

(1)

14.3 Inani leevetekhsi (vertices): _____

(1)

15. Gqibezela itheyibhule engezantsi:

Amaqhezu Aqhelekileyo	Amaqhezu aDesimal	Ipesenti
$\frac{1}{2}$	0,5	50%
$\frac{6}{10}$	0,6	15.1_____
15.2_____	0,75	75%

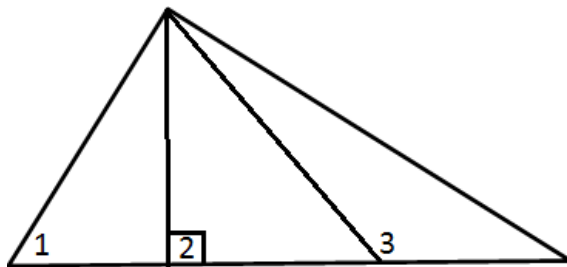
(1)

(1)

- 15.3 Ihempe ixabisa iR75 phambi kokuba ithotywe (discounted) ibe yi R60. Bala **ipesenti** ethotywe ngayo (**percentage** discount).

(2)

16. Qwalasela idayagram engezantsi uze uphendule imibuzo elandelayo:



- 16.1 Zingaphi **iitrayengile (triangles)** ezikwimilo engentla?

(1)

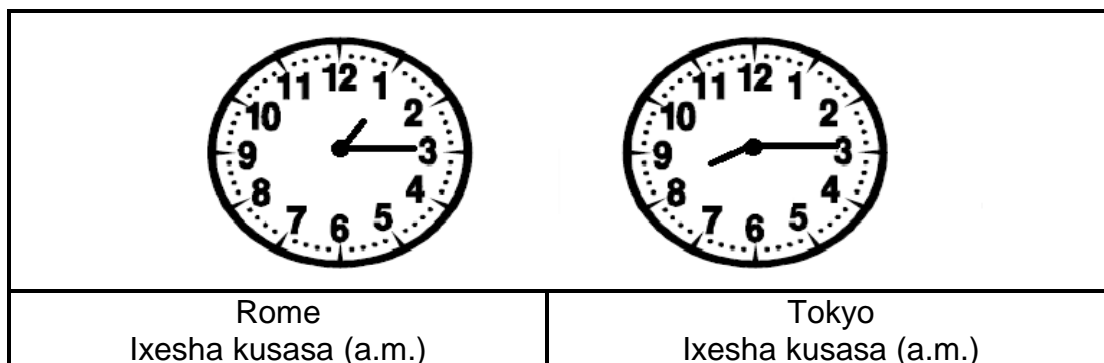
- 16.2 Lithini **igama le-engile 1 (angle 1)** kwimilo ye-2D engentla?

(1)

17. UMpho kufuneka afakele amavili kwiibhayisekile nakwiitrayisekile. Unamavili angama 20 kwivenkile yakhe ewonke. Zingaphi iibhayisekile neetrayisekile anokuzifakela?

(2)

18. Funda ixesha elikwiwotshi zelizwe uze uphendule imibuzo elandelayo.



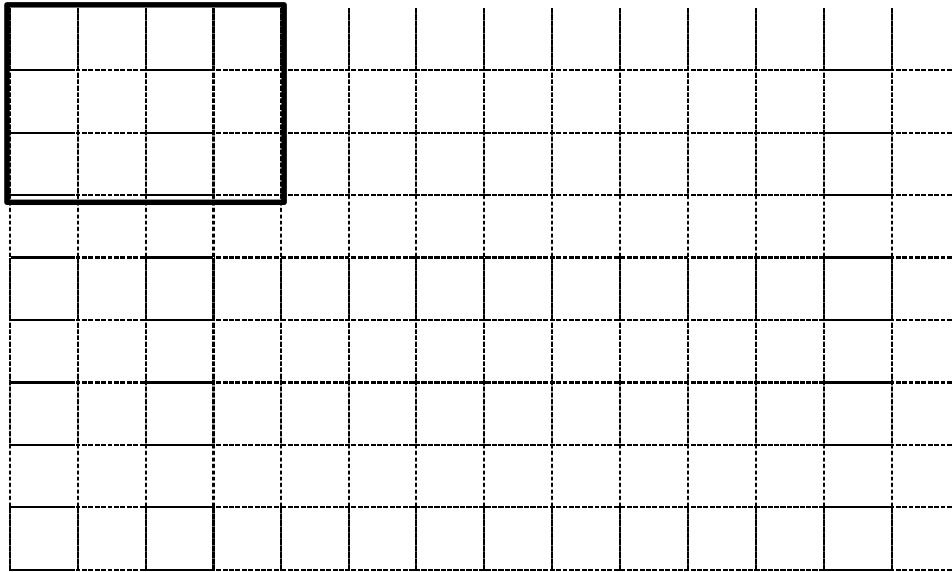
- 18.1 Bala umahluko phakathi kwexesha laseRome nelase Tokyo.

(1)

- 18.2 Ukuba ngu 20:50 eRome, iyakuba ngubani ixesha eTokyo nge **24-yeeyure** (24-hour notation)?

(1)

19. Kwigradi enikiweyo ngezantsi, imilo ye 2-D enobude (length) obuyi 4 yunithi (units) nobubanzi (breadth) obuyi 3 yunithi (units) izotywe. Ibloko e 1= 1 yunithi (1 block = 1 unit)



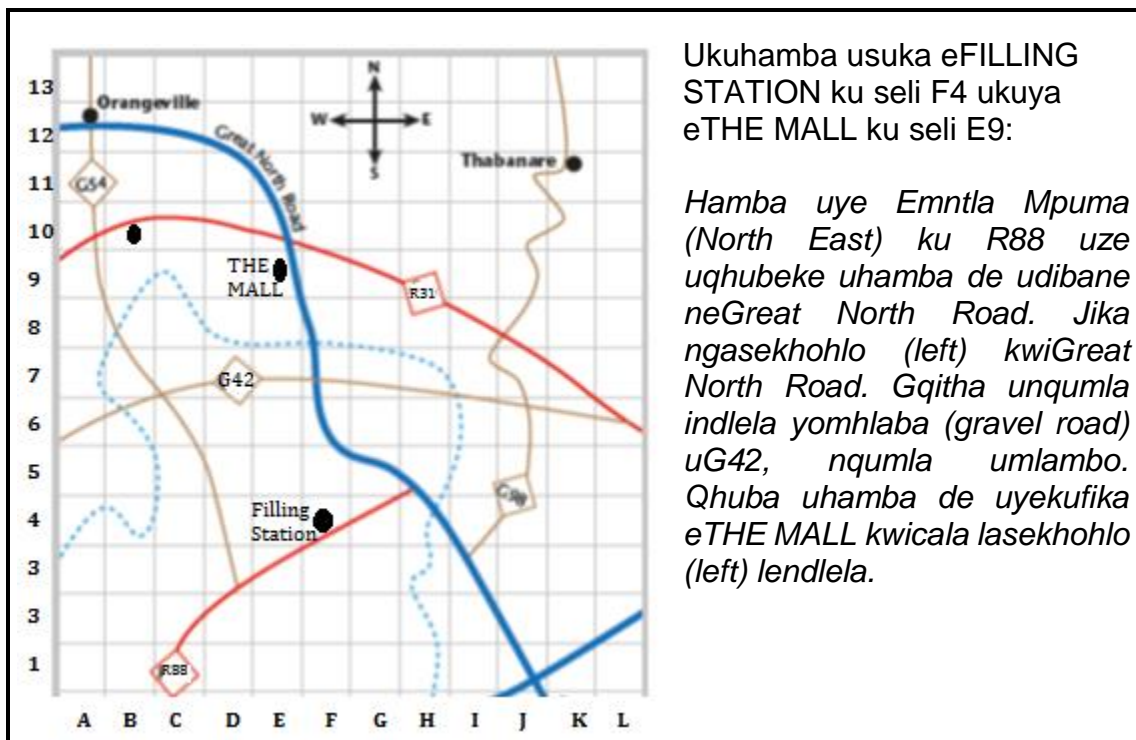
19.1 Ingakanani i-eriya/umjikelo (**area**) wemilo?

(1)

19.2 Kwigradi zoba ulwandiso (enlargement) lwerekthengile enikiweyo ubukhulu bayo buphindwe kabini (two times its size).

(2)

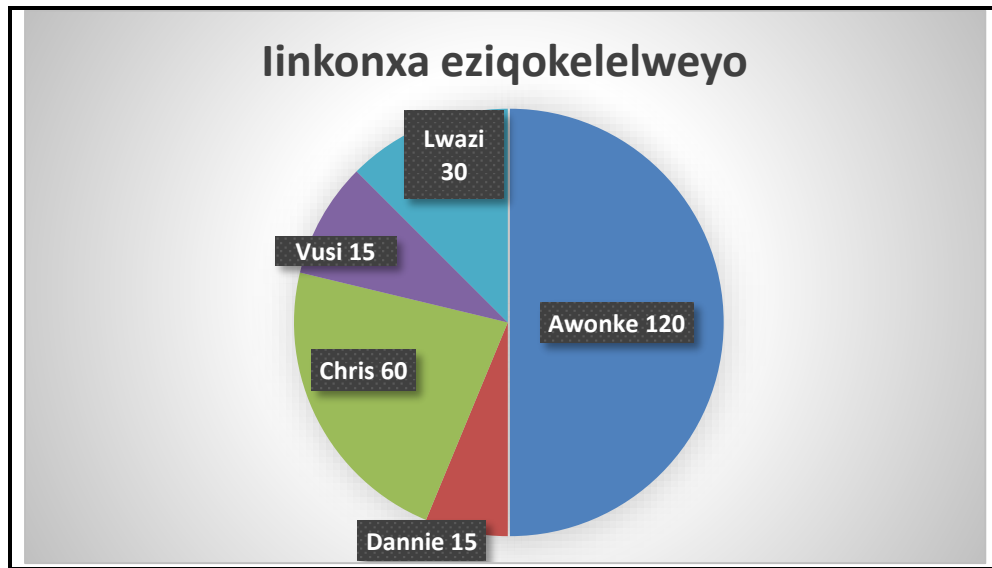
20.



Ukuba ulandela isikhombisi ndlela esingentla, yeyiphi iseli (cell) oyakugqitha kuyo phakathi kwendlela ejikayo (turnoff) ku G42 noR31?

(1)

21. Le tshati yepayi (pie chart) ingezantsi ibonisa inani leenkonkxa eziqokelelwe ngumfundi ngamnye ukulungiselela iprojekthi. Inani lilonke leenkonkxa eziqokelelweyo ngama 240.



- 21.1 U-Awonke makadibanise iinkonkxa zakhe nabani ukuze abe ne $\frac{3}{4}$ ka 240?

(2)

- 21.2 Ingakanani ipesenti yeenkonkxa eziqokelelwe nguChris?

(2)

- 21.3 Lingakanani iqhezu (fraction) leenkonkxa eziqokelelwe nguLwazi?

(2)

22. Lingakanani ithuba (probability) onokufumana u5 xa uthosa (tossing) ngedayisi (dice) elingezantsi?



(1)

EWONKE: 75