

SECTION A. 40 MARKS

Attempt all questions in this section.
Questions 1 to 20 carry two marks each

1 Work out:

$$\begin{array}{r} 214 \\ + 53 \\ \hline \end{array}$$

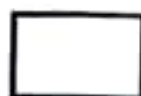
2 Write 14,019 in words

3 Solve for e $e - 6 = 11$

4 Subtract days hours

$$\begin{array}{r} 9 \text{ days } 3 \text{ hours} \\ - 2 \text{ days } 4 \text{ hours} \\ \hline \end{array}$$

5 Use the diagram below to find the shaded percentage



6 Given that set $W = \phi$, how many subsets has set W ?

7 Complete the sequence,

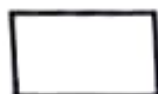
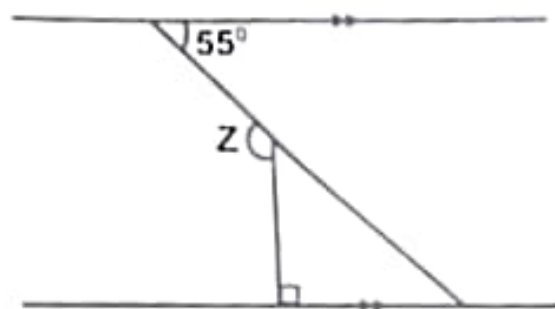
1 3 6 18 36 _____



8 The volume of a cube is 27cm^3 . Work out its total surface area

9 The probability of electing a boy as a class monitor is $\frac{5}{9}$. If there are 36 girls, how many boys are in the class?

10 Calculate the size of angle marked Z in degrees



11 Find the value of w $3w \equiv 4 \pmod{7}$



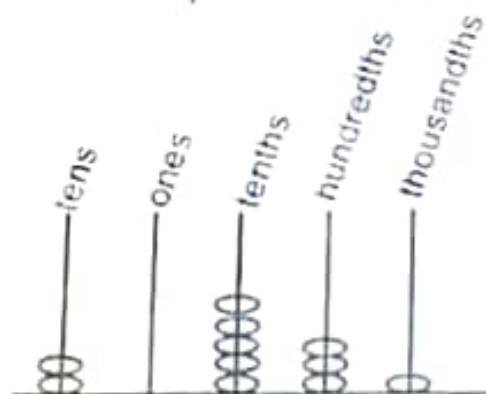
12. A hawker bought $\frac{3}{4}$ dozens of exercise books at sh. 13,500

He later sold each exercise book for sh. 2,200. Calculate his profit.

13. Solve and write the solution set for p
 $6 \leq 2p < 10$

14. Using a ruler, a pencil and a pair of compasses only, construct an angle of 60° .

15. Find the number represented on the abacus below.



- 16 A science quiz which ended at 4:15 p.m. took 90 minutes. At what time did it start?
- 17 Oliva bought a television set at Ug sh. 2,190,000. If one US dollar costs Ug sh. 3,650, how many US dollars did she pay?
- 18 In the diagram below, a string is wound round a cylindrical pipe of diameter 14cm.

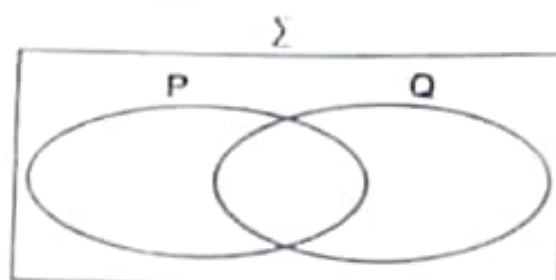


If the string is wound up 100 times, how long is the string?

19. Work out: $\frac{b^4 \times b^2}{b^5}$



20. Shade set Q complement in the figure below



SECTION B: 60 MARKS

Attempt **all** questions in this section

Marks for each part of the question are indicated in the brackets

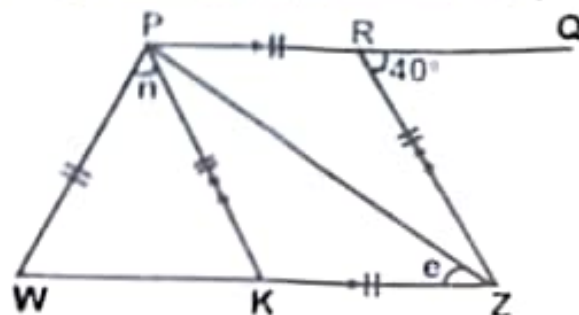
21. Babirye bought the following items from the shop
- 2kg of cowpeas at sh 4 000 per kg
 - 12 oranges at sh 1,500 for every 4 oranges
 - 2,500g of rice at sh 6,000 per kg
 - watermelons at sh 10,000

(a) Work out her total expenditure

(04 marks)

(b) If she was given a discount of **5%**, how much did she pay? (02 marks)

- 24 In the figure below, line PQ is parallel to line WZ and angle $QRZ = 40^\circ$. Study it carefully and answer the questions that follow.

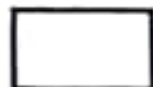


- (a) Find the size of angle e

(02 marks)

- (b) Work out the size of angle n

(02 marks)



(02 marks)

- 25 (a) Solve for b $2(b+4) = b+10$

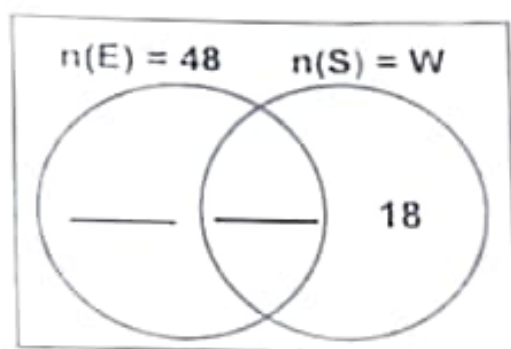


At a supermarket, a basin costs sh. 3,000 more than a bucket
 and a saucepan costs **two fifths** of the cost of a bucket. If all items cost
 sh. 33,000 calculate the cost of a bucket (03 marks)

- In a group of pupils, 48 like English (E). W pupils like Social studies (S). A third of the pupils who like English also like Social studies and 18 pupils like Social studies only

- Complete the venn diagram below using the information above

(03 marks)



- What is the probability of picking a pupil who does not like both subjects?

(02 marks)



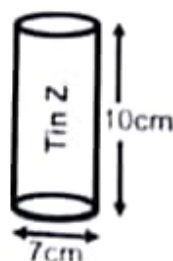
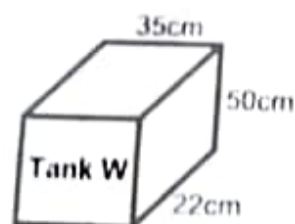
27. A motorist left Bushenyi at 9:45 a.m. and reached Masaka at 11:15 a.m. at a speed of 60km/hour. After staying in Masaka town for 30 minutes, he moved back to Bushenyi using the same route at a speed of 30km/h.

(02 marks)

(a) How far is Masaka from Bushenyi?

(b) Calculate the motorist's average speed for whole journey. (03 marks)

28. Tin (Z) was used to draw petrol from rectangular tank (W) which was full of petrol.



(a) How many full tins (Z) of petrol were drawn from the tank W?

(03 marks)

- (b) If each full tin of petrol costs sh. 25,000, how much money is needed to fill tank W? (02 marks)

- 29(a) Write 394.72 in standard form.

(02 marks)

- (b) Solve for k $3^{2k} \times 3^2 = 81$

(02 marks)

- 30 Port K is 80km from port W on a bearing of 060° Port Y is 60km from port W on a bearing of 300°






















- (a) Using the scale drawing of 1cm to represent 10km, draw an accurate diagram for the above information.


(04 marks)

- (b) Find the shortest distance from port K to port Y in km

(01 mark)

- 31 The pictograph below represents tomatoes sold in a market per day by Mrs Ssebuggwawo.

Monday	  
Tuesday	   
Wednesday	    
Thursday	  
Friday	     

Note  represents 10 tomatoes

- (a) How many tomatoes were sold on Thursday? (01 mark)
- (b) How many more tomatoes were sold on Friday than on Tuesday? (02 marks)
- (c) Express the number of tomatoes sold on Monday as a percentage of the total number (02 marks)

32(a) Work out $\frac{0.24 + 0.6}{1.2 \times 0.01}$ (03 marks)

(b) Simplify $1\frac{1}{6} \times 1\frac{1}{7} - 2\frac{2}{3}$ (02 marks)

