

CLEVERS' ORIGIN JUNIOR SCHOOLS

PLE PREP TEST 2022

PRIMARY SEVEN

MATHEMATICS

Time allowed: 2 hours 30 minutes

Index No.

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Candidate's Name: _____

Candidate's Signature: _____

School Name: _____

Read the following instructions carefully:

1. The paper has **two** sections: **A** and **B**
2. Section **A** has 20 short questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **ALL** questions. All answers to both Sections A and B must be written in the spaces provided.
5. All answers must be written using a blue or black ball point pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated for Examiner's use only.

FOR EXAMINER'S USE ONLY

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Qn. No	MARK	SIGN
1 – 10		
11 – 20		
21 – 30		
31 – 32		
TOTAL		

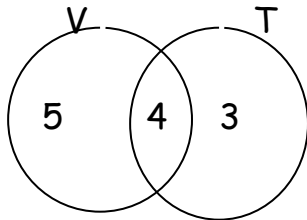
Turn over

SECTION A: (40 MARKS)

1. Work out: $80 \div 4$

2. Write 70,603 in words.

3. The Venn diagram shows the number of boys who play Volley ball (V) and tennis (T). Find the number of boys who play one game only.



4. Simplify: $9k - 4y - 3k + 5y$.

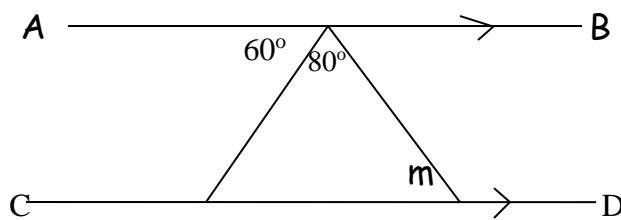
5. Work out: $\frac{3}{4} - \frac{2}{5}$

6. Damalie picks 28 mangoes every day. How many mangoes will she have picked in nine days?

7. Using a pair of compasses, pencil and a ruler only, construct an angle of $22\frac{1}{2}^\circ$ in the space provided below.

8. Write the number whose scientific notation is 8.61×10^{-2} .

9. In the diagram below, find the value of m .

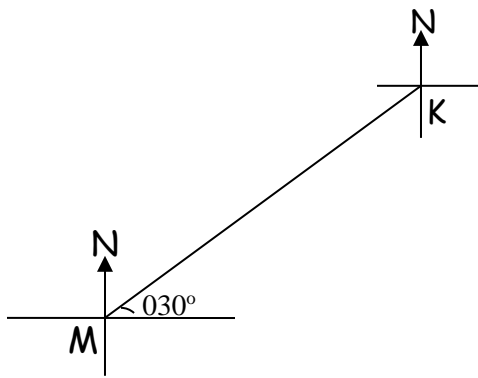


10. A meeting which lasted $1\frac{1}{3}$ hrs, ended at 5:10 p.m. What time did it start?

11. Express 0.16 as a fraction to its lowest term.

12. The base area of a cube is 49cm^2 . Calculate the volume of the cube.

13. Find the bearing of town m from town K in the diagram below.

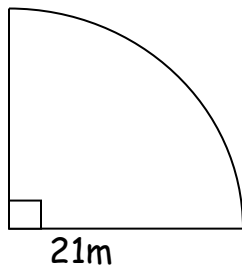


14. A woman deposited sh. 360000 on her savings account in a bank which offers an interest rate of 5% per annum. After how long will she get an interest of sh. 10500?

15. Work out:
$$\begin{array}{r} 3\ 0\ 3_{\text{five}} \\ -\ 2\ 2_{\text{five}} \\ \hline \end{array}$$

16. A boy had 20km still to cover after travelling $\frac{3}{4}$ of the journey. How long was the journey?

17. Find the perimeter of the figure.



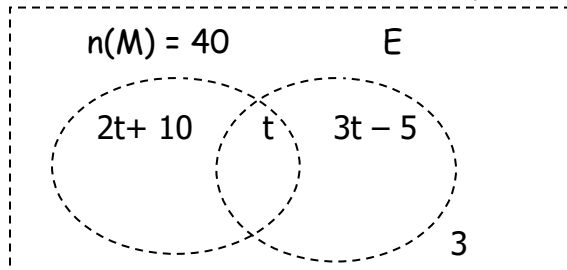
18. Mr. Mawanda walked 1800 metres in 18 minutes. Find his average speed in km/hr.

19. Given that $p = 4$ and $r = -3$, Find the value of $\frac{3p + r}{r}$

20. Solve for y : $2y - 3 = 4$ (finite 5)

SECTION B: (60 MARKS)

21. In the Venn diagram below, 40 pupils like Mathematics (M) and some like English (E) while t like both subjects.



(i) Find the value of t .

(2 marks)

(ii) How many pupils like English?

(2 marks)

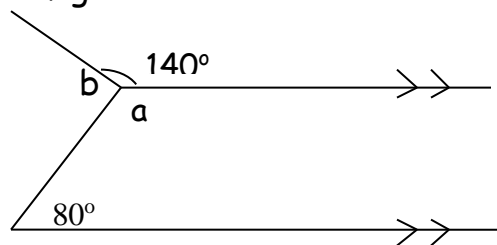
(iii) How many pupils are there altogether?

(2marks)

22. Mrs. Mukasa spends $\frac{1}{4}$ of her salary on food, $\frac{2}{5}$ of the remainder on rent and saves sh. 54000. How much is her salary? (5 marks)

23. Find the area of a circle whose circumference is 132cm. (4marks)

24. Study the figure below and answer the questions that follow:



(a) Find the value of a. (2 marks)

(b) Find the value of b. (3 marks)

25. A motorist covered a distance of 360km in 3 hrs from home to town A. He then continued to town B at a speed of 90 kph for 2 hours.

(a) How far is town B from town A? (2marks)

(b) Work out the average speed for the whole journey? (3marks)

26. Study the table below and answer the questions that follow.

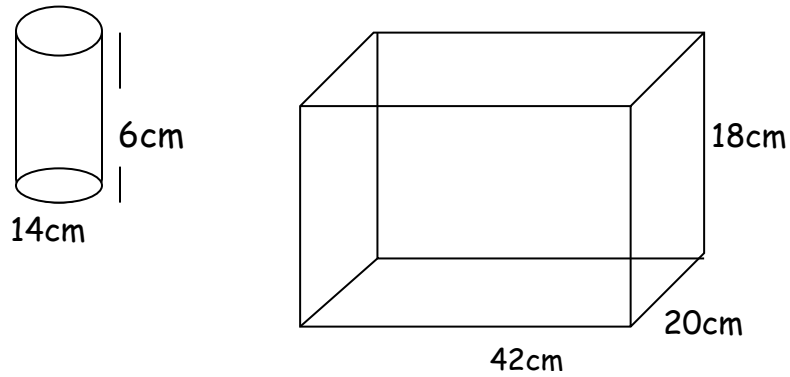
Currency	Buying price	Selling price
1 US dollar	Ug. Sh. 2500	Ug. Sh. 3000
1 K. sh.	Ug. Sh. 18	Ug sh. 25

(a) If a tourist has 600 dollars and 400 Kenya shillings, how much money in Ug. Sh. Can he get? (3 marks)

(b) Sarah has sh. 900000. How many US dollars can she get?(2 marks)

27 Using a pair of compasses, a ruler and a pencil only, construct rhombus ABCD of sides 5 cm with diagonals $AC = 8$ cm and $BD = 6$ cm. (4 marks)

28a) The cylindrical tins (A) are to be packed into the box (B) as shown below.



a) How many tins can be packed in the 1st layer? (1mark)

(b) How many layers can be packed in the tin? (1mark)

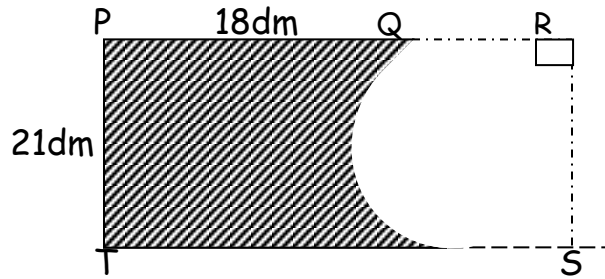
(c) Find the volume of the space not provided after packing the tins into the box. (4 marks)

29. (a) Solve for p: $4(4p - 2) - 4(2p + 6) = 16$ (3 marks)

(b) Find the value of n in the expression below.

$$32_n = 26_{\text{ten}} \quad (2 \text{ marks})$$

30. (a) Find the area of the shaded region. (3marks)



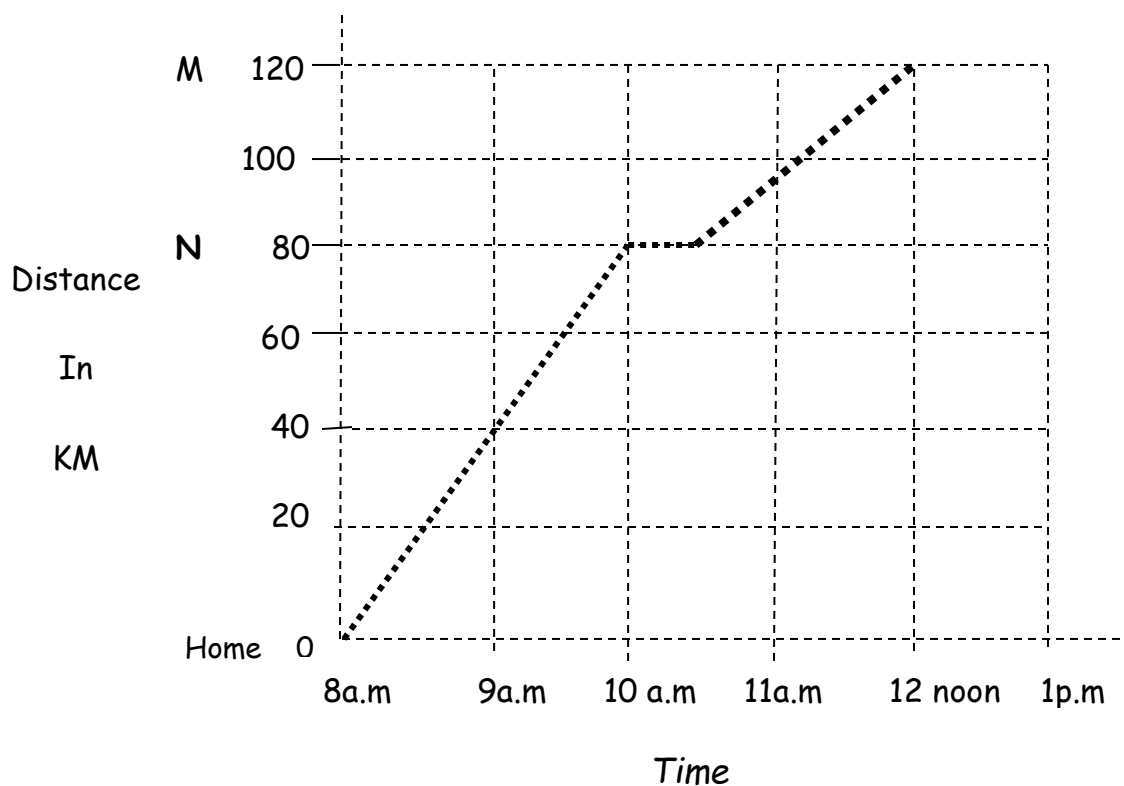
(b) What is the perimeter of figure PQST? (2 marks)

31 Timothy bought a radio at sh. 280000. He later sold it to Willy at a profit of 20%. Willy sold it to Moses at a loss of 5 %.

(a) Find the profit Timothy made. (2 marks)

(b) How much did Moses buy the radio? (3marks)

32. The graph below shows a motorist moved from home to town m via town N. Study it carefully and answer the questions that follow.



- (a) Find the motorists speed from home to town N. (2 marks)
- (b) At what time did the motorist leave town N? (2 marks)
- (c) Calculate the average speed for the whole journey. (2 marks) **END**