



HILLSIDE PRIMARY SCHOOL
BEGINNING OF TERM TWO EXAMINATIONS

2024

MATHEMATICS (SET TWO)

Time Allowed: 2 Hours 30 Minutes

Index No.

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Candidate's Name.....

Candidate's Signature.....

Stream.....

Read the following instructions carefully:

1. The paper has **two** sections: **A** and **B**.
Section A has 20 questions and Section B has 12 questions
2. Answer **all** questions. All answers to both sections **A** and **B** must be written in the spaces provided.
3. **All** working must be done using a blue or black ball-point pen or fountain pen. Any work written in pencil other than graphs and diagrams will not be marked
4. No calculators are allowed in the examination room.
5. Unnecessary changes in work may lead to loss of marks. Any handwriting that cannot easily be read may lead to loss of marks.
6. Do not fill anything in boxes indicated: **"For Examiners' Use Only"** and those inside the paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXRS' NO
1- 5		
6- 10		
11- 15		
16- 20		
21- 22		
23- 24		
25- 26		
27- 28		
29- 30		
31- 32		
TOTAL		

SECTION A: (40 marks)

1. Work out: 12×4

2. Write "four hundred sixty" in Roman numerals.

3. Find the next **two** numbers in the sequence below.

1, 3, 6, 11, 18,,

4. Given that set $M = \{0, 2, 4, 6, 8\}$. How many subsets are in set M?

5. What number has been expanded to give;

$$(5 \times 10^4) + (3 \times 10^2) + (2 \times 10^1)?$$

6. Express 20 m/s as kilometres per hour.
7. Using a ruler, a pencil and a pair of compasses only, construct an angle of 105° in the space provided below.
8. Subtract $(2h - 3)$ from $(4h - 6)$.
9. How many 400 gram packets of salt can be obtained from 20 kg of salt?
10. Find the median of the numbers 4, 0, 5, -3, 5 and -1.

11. Today is Wednesday. What day of the week was it 29 days ago?

12. Find the square root of $1\frac{7}{9}$.

13. Change 0.1818... as a common fraction.

14. Express 113_{four} as decimal base

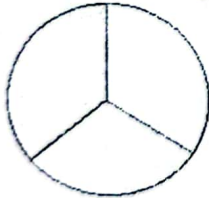
15. What angle is two thirds of its supplement?

16. Twelve men can do a piece of work in 5 days. How many more men are needed to do the same piece of work in 3 days?

17. Solve the inequality: $4 - 2r \leq 8$

18. Mudrat bought 4kilograms of meat at sh. 4,000 for every quarter kilogram. How much money did he pay for all the 4kg?

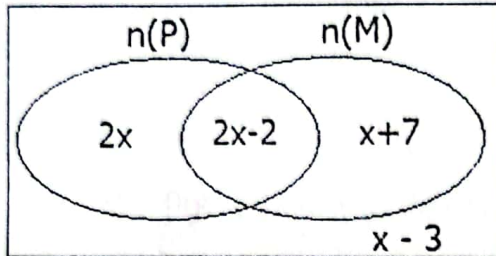
19. What percentage of the figure below is un-shaded?



20. The graduation ceremony of Mr. Duru started at 10: 30 pm and ended at 3: 00 am. How long did it last?

SECTION B: (60 marks)

21. Below is a Venn diagram showing the number of boys who like mangoes (M) and passion fruits (P). Use it to answer the questions that follow.



a) Find the value of x if 23 boys like mangoes.

(03 Marks)

b) What is the probability of picking a boy at random who likes neither of the two fruits?

(02 Marks)

22. a) Work out:

$$\begin{array}{r} 101_{\text{two}} \\ \times 11_{\text{two}} \\ \hline \end{array}$$

(02 Marks)

b) If $203_w = 53_{ten}$, find the value of w .

(03 Marks)

23. Mugabe went to the shop and bought the following items.

Item	Quantity	Unit price	Amount
Meat	3kg	Sh. 12,000	Sh.
Saltkg	Sh. 1,600	Sh. 2,400
Sugar	500g	Sh.	Sh.
Bread	2loaves	Sh.	Sh. 9,000
TOTAL EXPENDITURE			Sh. 49,500

a) Complete the table above.

(05 marks)

b) If he went with a fifty thousand shilling note, how much was his change?

(01 mark)

24. Chekwech spends $\frac{2}{3}$ of his monthly salary on food, $\frac{1}{4}$ of the remainder on rent and saves sh. 80,000. Calculate his monthly salary. (04 Marks)

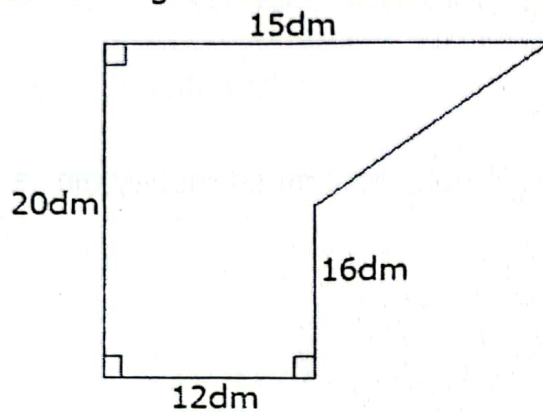
25. Mukisa traveled at 55 Km per hour took 4 hours to cover part of his journey. The rest of the journey was covered in 2 hours at a speed of 40 Km per hour. Find his average speed for the whole journey. (04 Marks)

26. a) Work out: $\frac{0.24 + 0.12}{0.3 \times 0.4}$ (03 Marks)

b) Simplify: $1\frac{1}{2} \times 2\frac{1}{4} \div 1\frac{1}{8}$

(02 Marks)

27. Use the figure below to answer the questions that follow.



a) Calculate its area.

(03 marks)

b) Find the total distance around the whole figure.

(03 marks)

28. Mary, Teddy and Jannet contributed a certain amount of money in such away that Mary contributed twice as much as Teddy and Jannet contributed sh. 2,000 less than Mary.

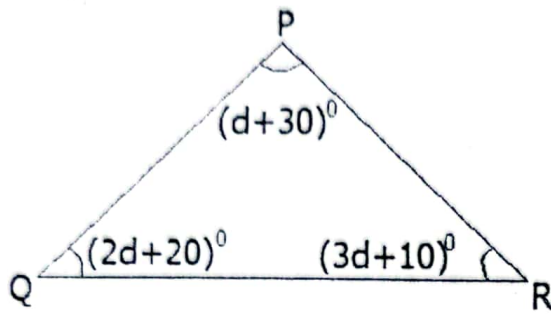
a) Write an expression showing their total contribution. (02 marks)

b) If they all contributed sh.13,000, how much money did Jannet contribute? (03 marks)

29. a) Change 3400 metres to kilometres. (02 marks)

a) How many strides of 50cm each can a boy make to cross a road that is 8 metres wide? (02 marks)

30. Study the figure below and use it to answer the questions that follow.



a) Find the value of d .

(03 Marks)

b) Calculate the size of angle QPR.

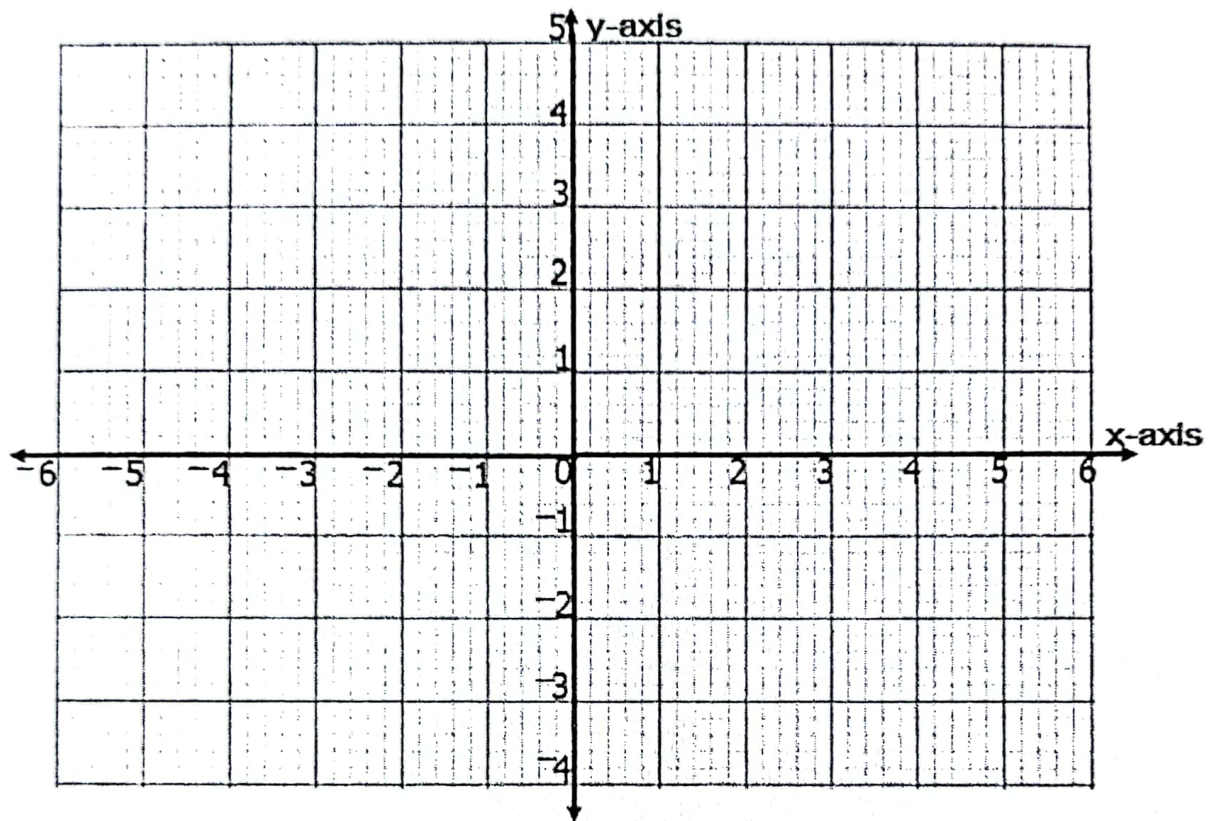
(02 Marks)

31. a) Solve: $6(x - 2) - (2x - 6) = 6$

(03 Marks)

b) Peter is 16years older than Paul now. In 8 years' time, the ratio in their age will be **3**:5. How old will Paul be in 8years' time? *(02 Marks)*

32. a) Plot the points A(-5, 2), B(6, 2), C(3, -2) and D(-2, -2) on the graph drawn. (04 Marks)



- a) Join points A to B, B to C, C to D and D to A. (01 Marks)

- b) Find the area of the figure formed. (02 Marks)

END