

KAMPALA PRIMARY SCHOOLS' SKYLINE EXAMINATIONS™

P.L.E – 2024

Set 04 (FINAL)

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.

--	--	--	--	--	--	--	--	--

Candidate's Name:.....

Candidate's Signature:.....

School Name:.....

District Name:.....

DO NOT OPEN THIS BOOK LET UNTIL YOU ARE TOLD TO DO SO.

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. Attempt **ALL** questions. All answers to both Sections **A** and **B** must be written in the spaces provided.
5. All answers must be written using blue or black ball-point pen or ink. Only diagrams and graphs work may be done in pencil.
6. Unnecessary alteration of work will lead to loss of marks.
7. Any handwriting that cannot easily be read may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated for examiners' use only.

**FOR
EXAMINERS'
USE ONLY**

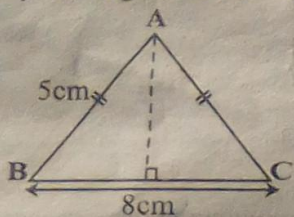
**FOR EXAMINERS'
USE ONLY**

Qn. No.	MARK	SIGN
1 – 4		
5 – 8		
9 – 12		
13 – 16		
17 – 20		
21 – 23		
24 – 26		
27 – 29		
30 – 32		
TOTAL		

SECTION A: 40 MARKSQuestions 1 to 20 carry two marks each.1. Multiply: 123×2

2. Write "Eight thousand eighty eight" in figures.

3. Study the figure ABC below and use it to work out the height of the triangle.



4. What is the next number in the sequence:

$$\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}, \underline{\hspace{2cm}}$$

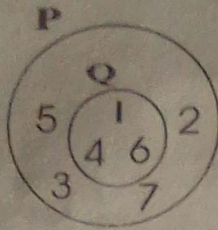
5. Solve the inequality:
 $18 \leq 4n + 6 \leq 30$

6. Karamagi sold his radio at Shs.140,000/= and realised a gain of Shs.40,000/=. What is his percentage gain?

7. A bag contains 10 blue pens and 8 red pens. If a pen is picked from the bag at random. Find the probability of picking a blue pen.

8. A polygon has an interior angle sum of 1080° . How many sides has the polygon?

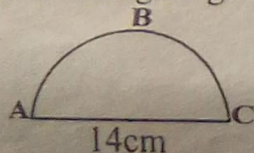
9. Using the figure below, find $n(P - Q)$.



10. Kanyike deposited Shs.200,000/= in the bank. If the interest rate was 10% per month. How much interest did he get after the 8 months?

<p>11. Subtract $3m - 2n$ from $5m - 2n$</p>	<p>12. Given that Set $X = \{1, 2, 3\}$. Write all the proper subsets of Set X.</p>
--	---

13. In the figure given below, find the length of ABC .



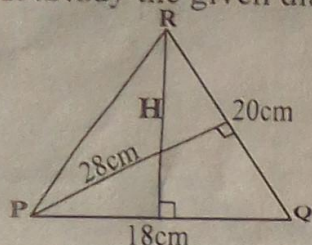
<p>14. What is the mean of $\frac{1}{2}$ and $\frac{3}{4}$?</p>	<p>15. Express $\frac{5}{6}$ to decimal form.</p>
---	--

16. The average mass of 4 people is 52Kg. When two people join them, their average mass becomes 50Kg. Find the mass of the two people.

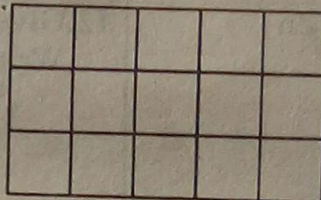
17. Increase 140 goats in the ratio $\frac{3}{4}:\frac{1}{2}$

18. Subtract: $1011_{\text{two}} - 110_{\text{two}}$

19. Study the given diagram below and use it to find the value of H .



20. Shade 40% of the diagram below.



SECTION B: 60 MARKS

21. Given that $n(B)$ represents pupils who like Beans and $n(M)$ represents pupils who like Meat in Masaku Parents School. If $n(\xi) = 51$, $n(B) = 24$, $n(M) = 28$, $n(B \cup M)' = 7$ and those who like both Beans and Meat are Z .

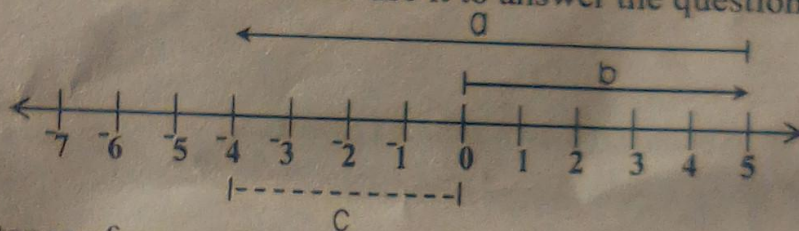
(a) In the space below, draw a Venn diagram to show the above information. (3 marks)

(b) Using the diagram, find the value of Z . (2 marks)

- (c) If those who like only one type of sauce received Shs.5,000/= each from their headteacher, how much money did the headteacher give pupils altogether? (2 marks)

22.(a) The mean weight of 6 people is 40Kg and the average of another 4 people is 65Kg. Work out the mean weight of all the people. (3 marks)

- (b) Study the figure given below and use it to answer the questions that follow.



- (i) Give the integer of arrow **a**.

(1 mark)

- (ii) Write the mathematical statement of the above figure.

(1 mark)

23. Anita has to fence her rectangular plot of land measuring 335 metres by 265 metres with poles placed 5 metres apart.

- (a) What number of poles does she need?

(3 marks)

- (b) If the cost of each pole is Shs.3,500/=-, how much money will she spend on fencing her land?

(2 marks)

24.(a) Town **Q** is 80Km on the eastern side of Town **P** and Town **R** is 60Km from **Q** on the bearing of 150° . Draw an accurate diagram to show the position of the three towns. (3 marks)

(b) Find the shortest distance between Town **P** and Town **R**. (2 marks)

25.(a) Three Kikuubo traders bought rice from Kigumba Rice Scheme as follows: (3 marks)
 $(K+3)$ metric tonnes, $(3K-10)$ metric tonnes and $(2K+5)$ metric tonnes.
The total quantity of rice bought was 64 metric tonnes. Calculate the value of **K**.

(b) What is the largest quantity of rice in metric tonnes that was bought by the traders? (2 marks)

26. The sum of values in the table below are the same diagonally, vertically and horizontally. Study it carefully and fill in the missing values to complete the table. (5 marks)

—	—	28	17
25	20	19	—
—	24	23	18
26	15	—	29

27. In a factory, Blue Band cylindrical tins of diameter 7cm and height 10cm are to be packed in a box measuring 50cm by 40cm by 52cm.

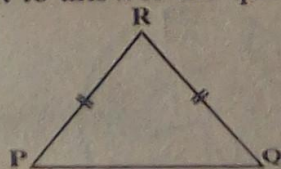
(a) Find the number of tins that can be packed in the box.

(2 marks)

(b) Calculate the amount of space left in the box after packing all the needed Blue Band tins.

(2 marks)

28. In the diagram PQR in an isosceles triangle in which angle RPQ is five times $(K-6)^\circ$ and angle PQR is $K+30$. Use it to answer the questions that follow.



(a) What is the value of K ?

(2 marks)

(b) Work out the size of angle PRQ .

(2 marks)

29.(a) A wheel of a vehicle covers a distance of 484 metres in 100 Revolutions.
How wide is the wheel? (Take π as $\frac{22}{7}$)

(3 marks)

(b) 40% of the members in the Music club are boys and girls are 90 in this club.
Find the number of members in the club.

(2 marks)

30.(a) Saleh drove from Kampala to Mbale at a steady speed of 80Km per hour for 2 hours. He then continued to Soroti at the same speed for 3 hours. Calculate his average speed for the whole journey.

(3 marks)

(b) Study the clock face below and use it to answer the questions that follow.



(i) If the activity that began at the afternoon time shown on the clock face above took 3 hours and 10 minutes. At what time did it end?

(1 mark)

(ii) Write the ending time in 24 hour clock system.

(1 mark)