

### **RAPHA EXAMINATIONS BOARD**

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## P.6 MID TERM ONE EXAMINATIONS 2025 MATHEMATICS

Time allowed: 2 hours 30 minutes

NAI	NAME:		
Date	<u> </u>		
	Read the following instructions carefully:		
1.	This paper is made up of section A and B.		
2.	Section A has 20 short answer questions (40 marks).		
3.	Section B has 12 questions (60 marks).		
4.	All answers to both section A and B must be written in the spaces provided.		
5.	All answers must be written in blue ink and diagrams should be drawn in pencil.		
6.	Any handwriting that cannot easily be read will lead to loss of marks.		
7.	Unnecessary alteration of work may lead to loss of marks.		
8.	No calculators are allowed in the examination room.		
	FOR EXAMINER'S USE ONLY		
	<b>A</b>		
	В		

TOTAL

#### **SECTION A (40MARKS)**

1.	Add: 48 + 13	2.	Write "Two thousand sixteen "in figures.
3.	Express 193 in roman numerals.	4.	Solve for x: $3x - 2 = 1$
5.	How many subsets can be got from a set with four members?	6.	Evaluate 4 – 6 =(Finite 5)
7.	Find the square root of 100.	8.	Below is a digital clock. How many minutes are remaining to the next hour?  5:35pm

9.	Simplify – 7 + 9	10.	Expand 946 using exponents.
11.	Without dividing, what number is completely divisible by three in 204?	12.	The cost of 6 pens is sh 3600. Find the cost of 3 such pens.
13.	Round off 0.239 to the nearest hundreds.	14.	Workout (25 X 5) + (4 X5) using distributive property.
15.	Write 0.027 in scientific notation.	16.	Find the next number in the sequence. 4, 7, 10, 13,

17.	Find the LCM of 15 and 36.	18.	Find the mean of 5, 2, 6, and 3.
19.	Using a ruler, sharp pencil and pair of compasses. Construct an angle of 105°	20.	The length of a rectangle is 8cm. Find the width if the area is 40cm <sup>2</sup>

# SECTION B (60MARKS) Answer all the questions in this section

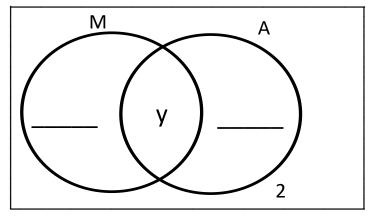
21. The sum of three consecutive counting numbers is 78. Find the numbers.

(5mks)

22. Out of 28 people who attended the burial ceremony, 15 people had MTN (M), 18 people had Airtel(A), x had both MTN and Airtel yet 2 had only Africell.

a) Use the given information to complete the Venn diagram below.





b) How many people had both MTN and Airtel?

(2mks)

c) What is the probability of choosing a person who had only Africell to serve porridge to the bereaved family? (1mk)

23. Primary one has eight streams. Three of the streams have 26 pupils each. Two of the streams have 32 pupils each and the rest of the streams have 40 pupils each. How many pupils are in primary one? (5mks)

24. Complete the shopping bill below.

QUANTITY	UNIT COST	AMOUNT
$2\frac{1}{2}$ Kg of meat	Sh. 15,000	
kg of rice	Sh. 7,000	Sh. 14,000
15 mangoes		Sh. 4,500
Total Expenditure		

(4mks)

b) If the boy who bought the above items was given a balance of sh. 4,000, how much money did he have at first? (1mk)

25 a) Find the value of the missing base in  $32y = 43_{\text{nine}}$ .

(3mks)

b) Convert 17ten to base two.

(2mks)

26. a) Find the square of  $1\frac{9}{16}$ .

(3mks)

b) Prime factorise 72 using multiplication of factors.

(2mks)

27. In the space provided below, use a sharp pencil, ruler and a pair of compasses to construct a regular hexagon in a circle of radius 4.6cm (4mks)

28. a) What smallest number can divide both 12 and 8?

(2mks)

b) The product of two numbers is 80. Their LCM is 20. Find the GCF of the two numbers. (2mks)

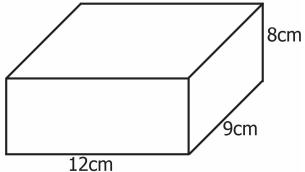
- 29. In a class of 36 pupils,  $\frac{5}{9}$  of them are girls and the rest are boys.
- a) What fraction of the class are boys?

(2mks)

b) How many more girls than boys are there?

(3mks)

30. Below is a Cuboid. Study it carefully and use it to answer the questions that follow.



a) Calculate the volume of the figure above.

(3mks)

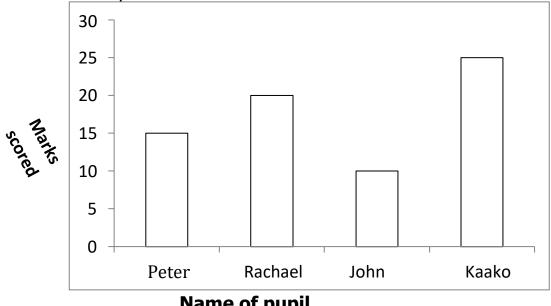
b) Workout the area of the shaded part .

(2mks)

31. a) Given that 
$$a = \frac{1}{3}$$
 and  $b = \frac{1}{5}$ , find the value of  $a - b$  (2mks)

b) 
$$(a + b) - b$$
 (3mks)

32. The bar graph below shows marks scored by pupils in a test. Study it and use it to answer the questions that follow.



Name of pupil

- (2mks) a) What mark did the best performer get?
- (1mk) b) Who scored 10marks?
- c) Represent Rachael mark using tallies. (2mks)
- d) Calculate the mean mark of the four pupils. (2mks)