

LEARNMARK EXAMINATIONS BOARD

YOUR PATH TO EXCELLENCE

PRE-MOCK EXAMINATIONS SET II 2025

MATHEMATICS

Time allowed: 2hours and 15minutes

Index number	Ran	ndom number			Personal no			
Candidate's Name					 			
Candidate's signatu	re				 			
District ID number								

Read the following instructions carefully

- 1. The paper has **two** sections: **A** and **B**.
- 2. Section A has 40 questions (40 marks).
- 3. Section **B** has **15** questions (**60marks**).
- 4. All the answers for both section **A** and **B** must written in the **spaces provided only**.
- 5. All answers must be written using **a blue** or **black** point pen or **fountain** pen or ink.
- 6. Any work written in a pencil except for diagram **will not be marked.**
- 7. Unnecessary changes in your work and handwriting that cannot be read easily may lead to loss of marks.
- 8. Do not fill anything in the table indicated

"FOR EXAMINER'S USE ONLY

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Qn. No.	MARKS	EXR'S No.		
1 – 5				
6 - 10				
11 – 15				
16 – 20				
21-24				
25 – 26				
27 – 28				
29 – 30				
31 – 32				
TOTAL				

SECTION A: 40 MARKS

Questions 1 to 20 carry 2 marks each.

1. Add 423 + 66

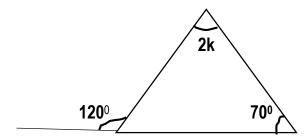
2. Solve for **p**: 39 - 11p = 6

- 3. Write 66,666 in words.
- 4. Obed has **450** cows. Each cow produces an average of **12** litres daily. How much milk does he get in a leap year?

- 5. Find the next two numbers in the sequence.
 - 1, 8, 27, 64, _____, ____

6. Mustafa had $\frac{4}{9}$ of a cake and gave $\frac{1}{3}$ of it to Namata. What fraction of the cake remained?

7. In the diagram below, find the value of k.



8. Work out: $\sqrt{\frac{64}{100}}$

9. What is the mean of $\frac{1}{2}$ and $\frac{1}{3}$?

10. Express 60cm as a percentage of 3 metres.

11. Given that **PUQ** = $\{1, 2, 3, 4, 5, 6, 7, 8\}$, **P** \cap **Q** = $\{1, 4, 7\}$ and **P**¹ = $\{5, 6, 8\}$ List the elements of set **P**

12. Express **0.2424**as a common fraction.

13. The cost of a dozen of books is **sh.48000**. Find the cost of **4** similar books.

14. Simplify: **4 - 6.**

15. Expand 468 using exponents.

16. Express **00:45 hours** in **12 hour** clock system.

17. If **yesterday** was **Friday**, what day of the week will it be after 15 days from now?

18. How many lines of folding symmetry has the figure below?



19. Given that $\mathbf{K} = 8$, and $\mathbf{L} = 6$. Find the value of $\sqrt{\mathsf{KL} + 1}$

20. Work out: $\frac{3}{4} - \frac{5}{9} =$

SECTION B: 60 MARKS

Answer all questions in this section

Marks for each Question are indicated in the brackets.

21. The Venn diagram below represents the number of pupils who play Net ball **(N)**, Football **(F)** and neither of the two. Study it carefully and use it to answer questions that follow.

 $\sum = \frac{N}{2k+1} \frac{F}{k+1} \frac{F}{4k-3}$ K-1

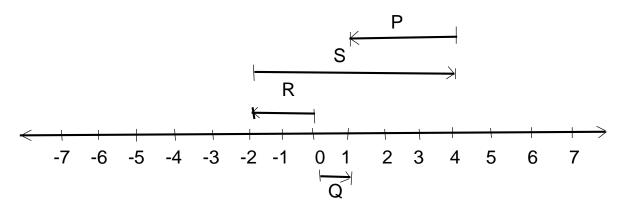
a). If 11 pupils do not play netball, how many pupils play football? (3 marks)

b). Find the probability that a pupil who play both games is selected to be a team leader. (2 marks)

22. In a village of 450 people, ³/₅ are males and the rest are females. ²/₃ of males are above 18 years and ¹/₄ of the females are below 18 years.
a). Find the total number of people below 18 years. (3 marks)

b). If the number of males increased by 30, in what ratio did it increase to the total number of people? (2 marks)

23. Use the number line below to answer the questions that follow.



a). Write the integers represented by the arrows.

(4 marks)

i.	P	
ii.	S	
iii.	R	
iv.	Q	
b).	Write the mathematical sentence of the above number.	(2 marks)

24. Using a ruler, a pencil and a pair of compasses only. Construct a

Quadrilateral PQRS where PQ = **8cm**, PS = **5cm** angle SPQ = **90**⁰, angle

PQR = **60**⁰ and angle RSP is a right angle. (5 marks)

25. The width and length of a rectangle are in the ratio of **2:3** respectively. If the area of the rectangle is **150cm²**. a). Find the actual length and width of the rectangle. (3 marks) (2 marks) b). Calculate the perimeter of the rectangle. 26. Bell A rings every after 45 minutes and Bell B rings every after 50 minutes. Both bells ring together for the first time at 8:00 a.m. a). After how long will they ring together again? (3 marks) b). At what time will they ring together for the second time? (2 marks)

- 27. A driver left town X at 9:30am travelling at a speed of 70km/h and made a stopover at the market at 11:30am for an hour. He then continued to town R at a speed of 60km/h covering a distance of 120km.
 - a). Calculate the distance between town **X** and the market. (2 marks)

b). Find his average speed for the whole journey. (3 marks)

- 28. Given that $\mathbf{a} = \mathbf{6p}$ and $\mathbf{P} = \mathbf{4}$.
- a). Find the value of **2a** + **3p** (2 marks)

b). Solve and find the solution set for; $2 - 3w \ge 14$. (3 marks)

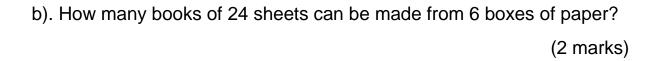
29. The rates at which the bank buys and sells United States dollars (US \$) and Kenya shillings (K.sh) are shown in the table below.

Currency	Buying rate	Selling rate	
1 US dollar (US \$)	UG.sh. 3400	UG sh. 3550	
1 Kenya shilling (K.sh)	UG sh. 38	UG sh. 40	

a). A tourist had 500 United states dollars and K.sh 7500. How much money in Uganda shillings did he get from the bank? (3 marks)

b). Convert UG sh. 284,000 into United States dollars. (2 marks)

- 30. A box of paper contains five reams of 500 sheets each.
 - a). How many sheets of paper are in the box? (3 marks)

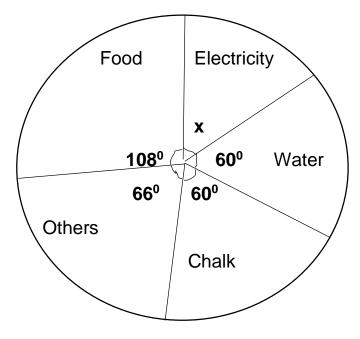


31a. What number has been expanded to give;

$$(2 \times 5^3) + (4 \times 5^2) + (1 \times 5^1) + (3 \times 5^0)$$
 (2 marks)

b). Work out:
$$320_{\text{five}} - 23_{\text{five}}$$
. (2 marks)

32. The pie chart below shows the school's weekly expenditure. Use it to answer questions that follows.



a). Find the value of x.

(2 marks)

b). If the school spends sh. 192,000 more on food than water, find how much money is spent in a week. (3 marks)

END