MASAKA CITY EXAMINATIONS BOARD

PRIMARY LEAVING MOCK EXAMINATIONS

2025

MATHEMATICS

Time Allowed: *2 Hours 30 Minutes*

RANDOM NO.						SCHOOL CODE	PERSONAL NO.		

Candidate's Name: .....

Candidate's Signature: .....

Read The Following Instructions Carefully:

1. Do not write your **school name** anywhere on this paper.
2. This paper has **two** sections: **A** and **B**. Section **A** has **20** questions and section **B** has **12** questions. This paper has **15 printed pages**.
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provide.
4. **All** working **must** be written in **blue** or **black** ball point pen or ink. Any work done in pencil other than on graphs and diagrams will **not** be marked.
5. **No calculators** are allowed in the examination room.
6. 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 EXAMINERS' USE ONLY" and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
QN. No.	**MARKS**	**EXR'S 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

Attempt all questions in this section.

Questions **1** *to* **20** *carry* **two** *marks each.*

1. **Work out:**

$$\begin{array}{r} 8\ 3\ 6 \\ -\ 4\ 1\ 2 \\ \hline \\ \hline \end{array}$$

2. **Solve for n:** $2(n - 3) = 18$

3. **Simplify:** $^{+}5 - {}^{+}8 - {}^{-}10$

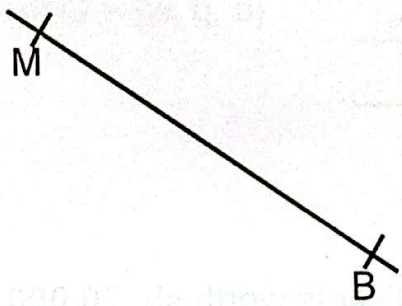
4. Complete the sequence below correctly.

8, 4, 2, 1, _____

Turn Over

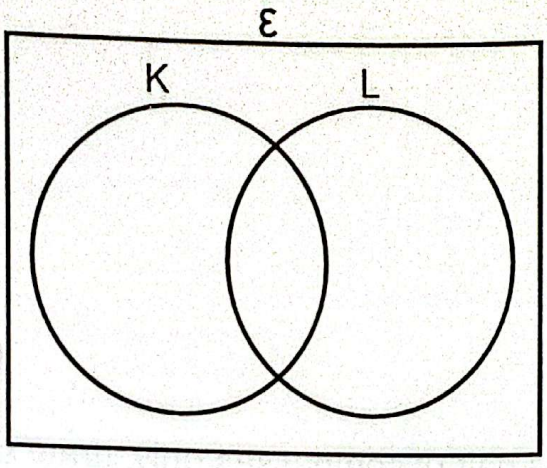
5. Write in figures; **Ninety thousand, two hundred six and thirty - three hundredths.**

6. Using a ruler, a pencil and a pair of compasses only, draw a perpendicular bisector on the line segment MB.



7. An examination paper started at **2:30pm**. A candidate reached **15** minutes late. If the exam ended at 4:00 p.m, how long did the candidate take writing the examination?

8. On the Venn diagram below, shade $(K \cap L)^1$.



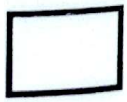
9. **Work out:** $1\,1\,0\,0_{two}$

$-\ \ 1\,1\,1_{two}$

_____

_____

10. At a music concert, tickets worth sh. **20,000** each were issued out numbered consecutively from 512 to 771, How much money was collected?



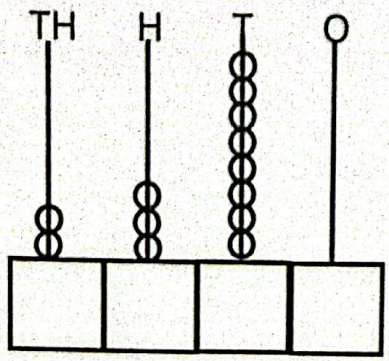
Turn Over

11. Work out the mean of p + 2, 2p - 4, 6 and 3p + 1.

12. List the proper subsets of set **G**.
Given that set G = {w, q, u}

13. **20** poles are fixed in a straight line along one side of the road. The poles are fixed at intervals of **5** metres. Find the length of the road.

14. Write the number shown on the abacus in standard form.

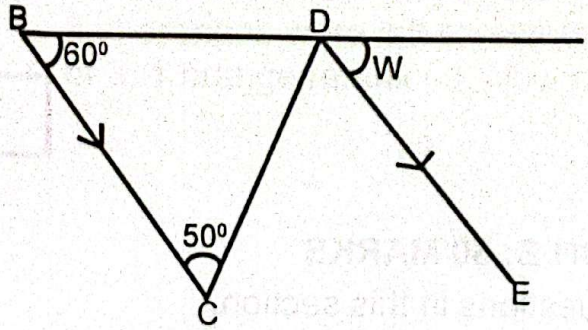


15. **Solve** for **e**: $3^{2e} \div 81 = 1$

16. Mr. Abuo **borrowed** sh 180,000 for 3 years. He paid back a total sum of sh.216,000. Calculate his **percentage** interest rate.

17. Solve the inequality: $3(2-k) < 15$.

18. In the diagram below, line BC is **parallel** to line DE. Find the size of angle W.



19. A cyclist left Mbarara at 10:05 pm and reached Kasese at 5:20am. For how **long** was the journey?

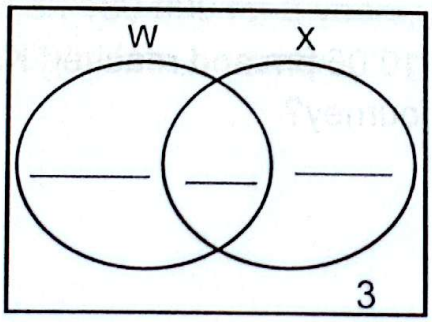
20. Work out the **distance** round a circular garden of diameter 28 metres. (use π as $\frac{22}{7}$)

SECTION B: 60 MARKS

Attempt **all** questions in this section.

Marks for **each part** *of the question are* **indicated** *in the brackets.*

21. Complete the Venn diagram with the information given below.
$n(W - X) = 12$, $n(X - W) = 8$, $n(W \cup X)' = 3$ $n(\varepsilon) = 30$ *(04 marks)*



(b) Find the **probability** of picking a member of **w** complement.

(02 marks)

Turn Over

22. (a) Use a dail to work out 3 - 4 = _____ (mod 6) *(02 marks)*

(b) Amos had some oranges. When he grouped them in heaps of 8, 4 oranges were left and when he put them in groups of 3, 1 orange remained. How many oranges did he have?

(03 marks)

23. Solve the inequality and give the solution set; $3(2 - h) \leq h + 14$.

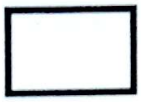
(04 marks)

Turn Over

24. Daniel divided his land as follows; $\frac{2}{5}$ to his wife, $\frac{1}{3}$ to his sons and the rest to the daughters.

(a) Find the fraction he gave to his daughters. *(03 marks)*

(b) If he gave 20 acres of land to his sons, how many acres did he have altogether? *(02 marks)*

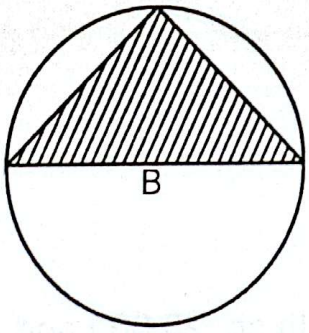


Turn Over

25. (a) Express the product of 263 and 7 using exponents. *(03 marks)*

(b) Simplify: $\frac{W^5 \times W^7}{W^2 \times W^3}$ *(02 marks)*

26. The figure below shows a roundabout with a triangular flower garden in it. B is the centre of the roundabout and the total distance around the roundabout is 88 metres. Study the figure and answer the questions that follow.



(a) Find the area of the roundabout that is not covered by the flower garden. (Take π as $\frac{22}{7}$) *(05 marks)*

Turn Over

27. A father sent his daughter to a shop with the list of items to buy;

2kgs of sugar at sh. 5,500 per kg.

250 gm of salt at sh. 2,000 per kg.

A bar of soap at sh. 6,000.

$1\frac{1}{2}$ kg of rice at sh. 9,000.

(a) Prepare a shopping bill table for the list above. *(05 marks)*

Items	Quantity	Unit price	Total cost
salt			
sugar			
rice			
soap			
Total			

(b) If the daughter went with sh. 20,000 and it was not enough to buy all the items, how much more money was needed? *(01 mark)*

Turn Over

28. Using a ruler, a pencil and a pair of compasses only, draw line AC = 4cm, bisect AC so that the perpendicular bisector meets AC at O. On the bisector, line OB = 2cm and OD = 6cm, join BC, CD, DA and AB to form a quadrilateral ABCD. *(04 marks)*

(b) Name the quadrilateral ABCD formed. *(01 mark)*

29.(a) Round off 86,973 to the nearest thousands. *(02 marks)*

(b) Makolo is LX years old now. In which year was he born? *(02 marks)*

Turn Over

30. A cyclist started his journey at 8:30 am from Kampala to Kabale. As he reached Masaka, he rested for 30 minutes after covering 180km at 90km/h. He continued to Kabale for 4hours at 70km/h.

(a) Find the cyclist's average speed for the whole journey. *(04 marks)*

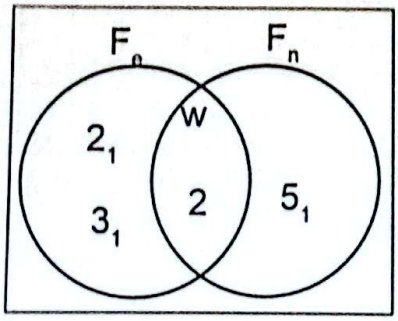
(b) At what time did he reach Kabale? *(02 marks)*

Turn Over

31. (a) **Four** pieces of wire measuring 48m, 36m, 24m and 60m are to be cut into equal pieces without wastage. What is the length of the longest piece of wire that can be cut from each wire?

(02 marks)

(b) Study the prime factors on the Venn diagram below and use them to answer the questions that follow.



Given that the G.C.F of F_e and F_n is 6, find the;

(i) L.C.M of F_e and F_n. *(02 marks)*

(ii) value of **e**. *(02 marks)*

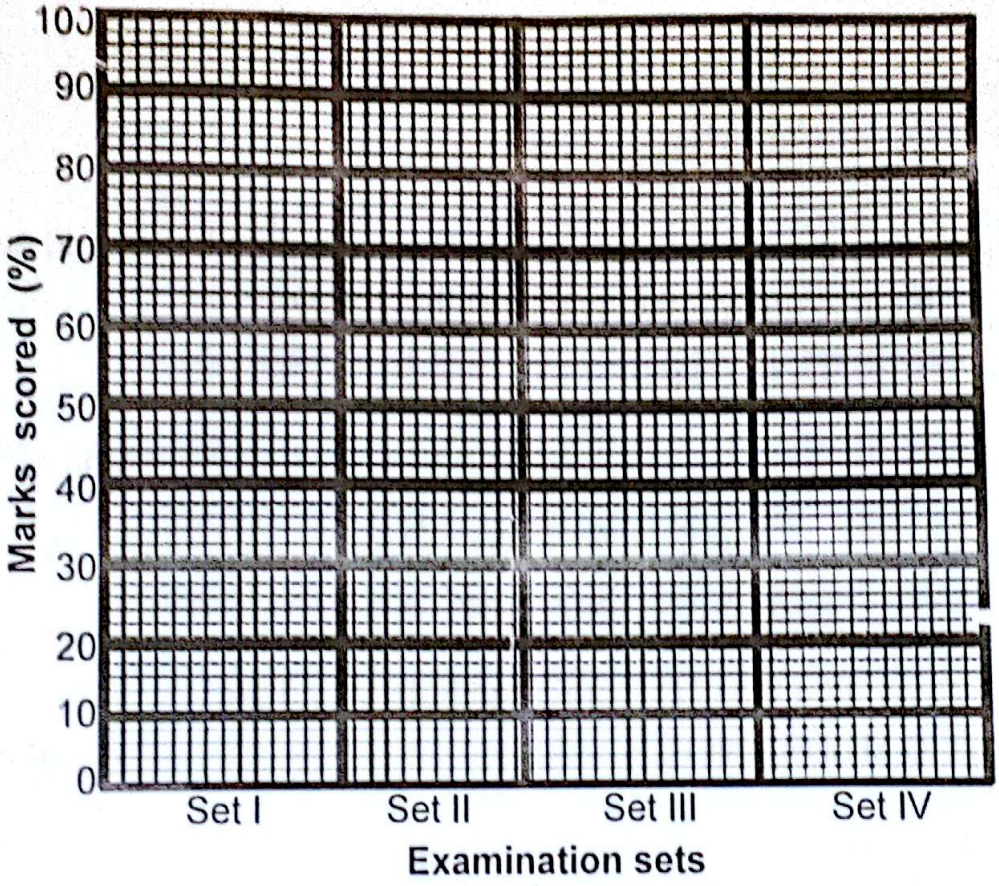
Turn Over

32. Nyangoma scored marks in a series of examination sets as shown in the table below;

Set of examination	Set I	Set II	Set III	Set IV
Marks scored (%)	78	84	86	90

Use the above information to complete the graph below.

(04 marks)



Turn Over