



THE CRANES EXAMINATIONS BOARD

FINAL SET - ONE - 2025

MATHEMATICS

Time Allowed: 2 hours 30 Minutes

Random No.						Personal No.		

Candidate's Name:

Candidate's Signature:

District ID No.

--	--	--	--

Read the following instructions carefully:

1. Do not write your **school** or **district 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. The paper has **15 printed pages**.
3. Answer **all** questions. **All** working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** the working **must** be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than 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**.
7. Do not fill anything in the table indicated **"FOR EXAMINERS' USE ONLY"** and in the boxes inside the question paper.

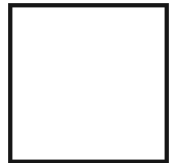
FOR EXAMINERS' USE ONLY		
QN. NO.	MARKS	EXR'S NO.
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

SECTION A: 40 MARKS

Answer ***all*** questions in this section.

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

1. Work out: 14×2
2. Given that set $Y = \{a, b, c, d, e, f\}$ and $X = \{a, e, i, o, u\}$. Find the $n\{Y - X\}$
3. What number has been expanded below:
 $(5 \times 10^2) + (2 \times 10^1) + (3 \times 10^{-1})$
4. Yogi Steel Manufacturing Company Limited pays sh. 6,000 to each worker everyday. How much money will 7 workers earn altogether in a week?
5. Simplify: $3(k + 2p) - 2(3k + p)$



6. Calculate the circumference of a circle whose diameter is **28m**.

7. Given that  represent 9 trees. How many trees will be represented by  ?

8. Work out: 4 2 2_{five}

$$\begin{array}{r} - \quad 3 \quad 2_{\text{five}} \\ \hline \\ \hline \end{array}$$

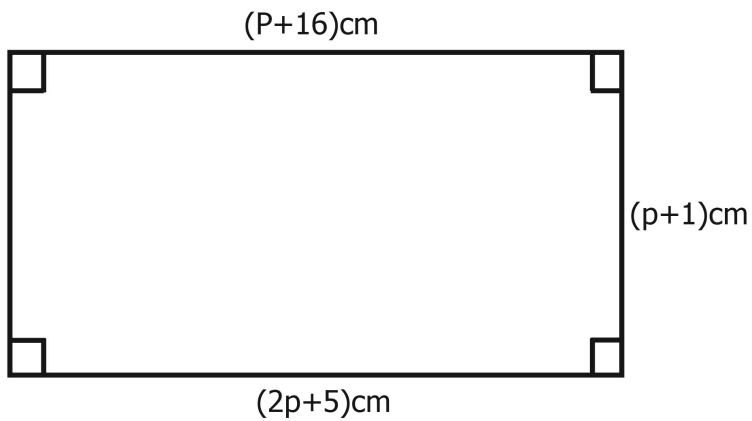


9. Write **11:02 p.m** in military time.

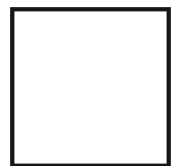
10. Express **29** in Roman numeral.

11. What is the largest number that can exactly divide **12**, **16**, and **24**?

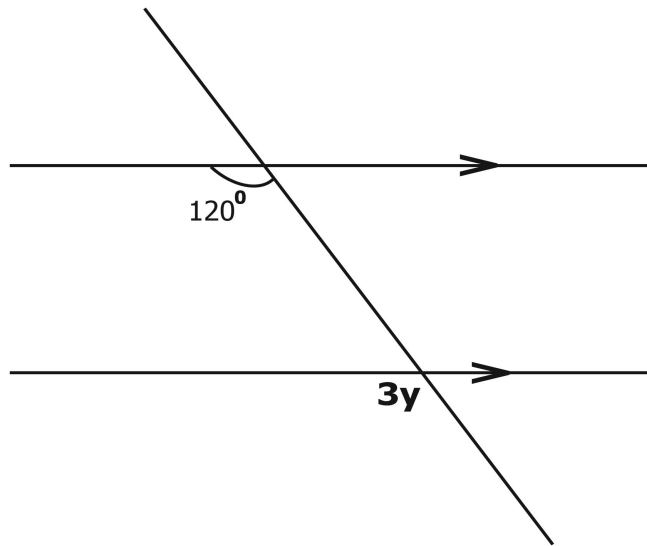
12. Work out the value of **P** in the figure below.



13. Solve: $1.2 - 4.5 + 6.8$

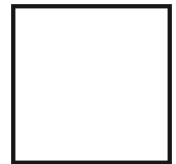


14. Study the figure below carefully and use it to answer the questions that follow.



Find the value of **y**.

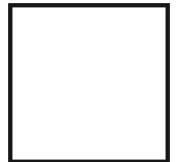
15. A bucket full of water weighs 70kg and the weight of the empty bucket is 5.2kg. Find the weight of the bucket when $\frac{3}{4}$ full of water.



16. Find the next number in the sequence.

1, 3, 11, 13, 21, _____

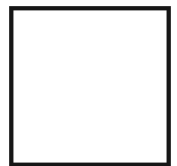
17. Using a sharp pencil, a pair of compasses only and a ruler only, construct an angle of **120°** .



18. Increase 500kg by 20%.

19. A tourist came with **25** US dollar to Uganda and went to a bank that had the exchange rate as **1** US dollar = Ug sh. 3780.
How much Uganda shillings did the tourist get from the bank?

20. Express **25** tonnes as kg.



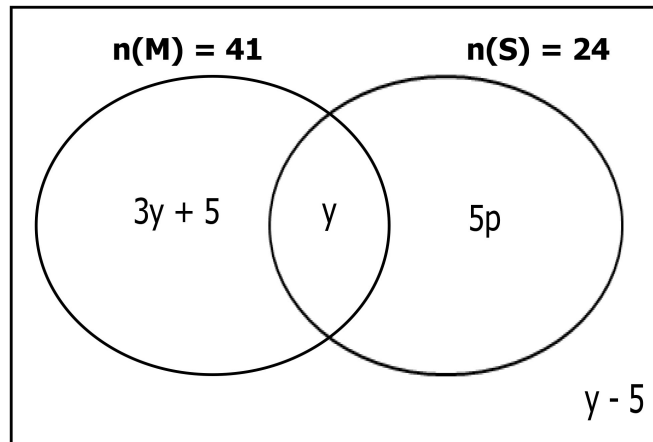
SECTION B: 60 MARKS

Answer **all** questions in this section.

Marks for each section are indicated in the brackets.

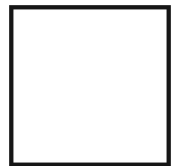
21. Given that 41 farmers grow maize(M) 24 farmers grow simsim(S) in a certain village and $(y - 5)$ farmers grow other kinds of crops. Use the Venn diagram below to answer the questions that follow.

$$n(\xi) = \underline{\hspace{2cm}}$$



- (a) Find the value of **y**. (02 marks)

- (b) Find the value of **p**. (02 marks)



(c) How many farmers are in the village?

(01 mark)

22. Akello, Olupot and Adeke shared a certain amount of money in the ratio of **2:3:7** respectively, and Adeke got **sh. 36,000** more than Olupot.

(a) How much did each of them get?

(03 marks)

(b) How much less money did Akello get than Adeke?

(02 marks)



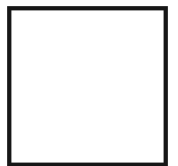
23. Mwandale Ibrahim travelled from Mbarara to Kampala at a speed of 75km/hr in 3 hours and spent 1 hour shopping then later returned through the same route in 6 hours.

(a) How far is Kampala from Mbarara? *(02 marks)*

(b) Calculate his average speed for the whole journey while traveling. *(04 marks)*

24. With the help of a sharp pencil and a pair of compasses only.

(a) Construct a parallelogram **ABCD** where **AB = 7cm**, **BC = 5cm** and **BAD = 60°**. *(04 marks)*



(b) Draw a perpendicular line from **D** to meet line **AB** at point **X**. *(01 mark)*

25.(a) Solve: $2y - 5 = 13$

(02 marks)

- (b) If today Wednesday a seminar that is to take place is to take 20 days starts today, when will it end? (03 marks)

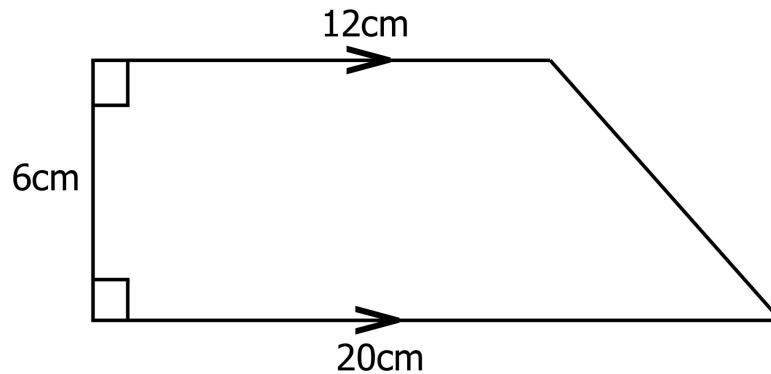
26. Nyapendi went to Lukaya market and bought the following items;
3 bars of soap at sh. 4,000@
3 1/2 of sugar at sh. 4,0000@
2kg of meat at sh. 28,000
5kg of rice at sh. 5,0000@

- (a) How much did Nyapendi spend altogether? (03 marks)



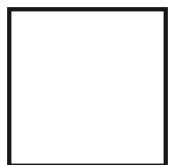
- (b) How much would Nyapendi pay altogether if she was offered 10% discount on rice only? *(02 marks)*

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



- (a) Calculate the area of the figure above. *(02 marks)*

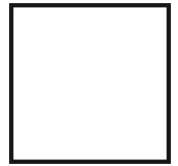
- (b) Find the perimeter of the trapezium above. *(03 marks)*



28.(a) Work out:
$$\frac{0.8 \times 0.24}{0.9 + 0.3}$$

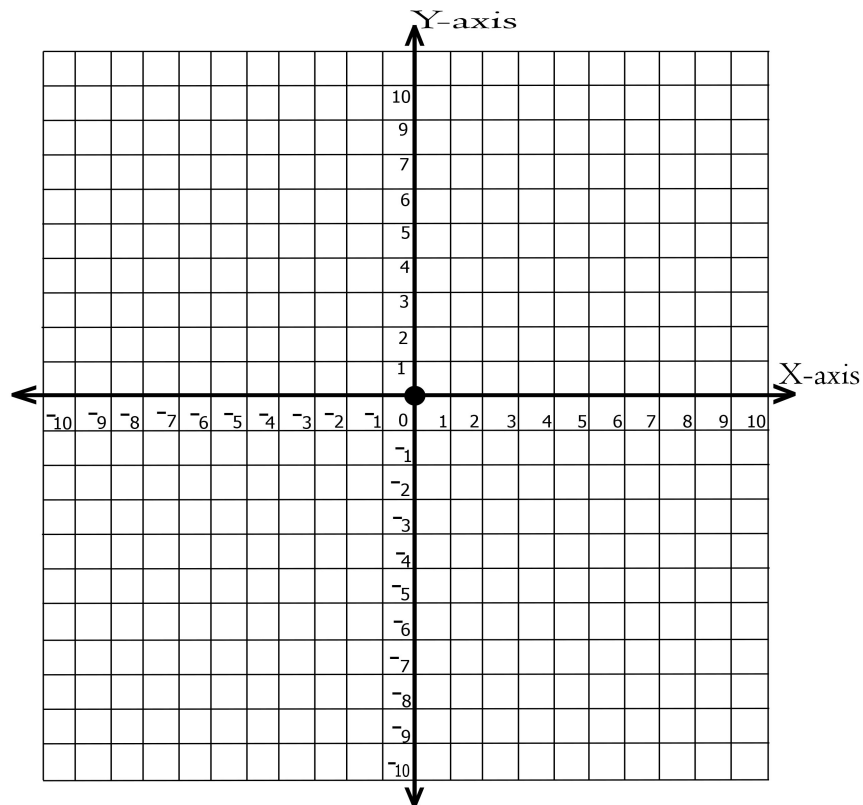
(03 marks)

(b) Express 0.272727 as a vulgar fraction in its simplest form.
(02 marks)



29.(a) Use the grid below to plot the following points.
A(+3, -3), **B**(-3, -3) **C**(-3, +3) and **D**(+3, +3)

(04 marks)



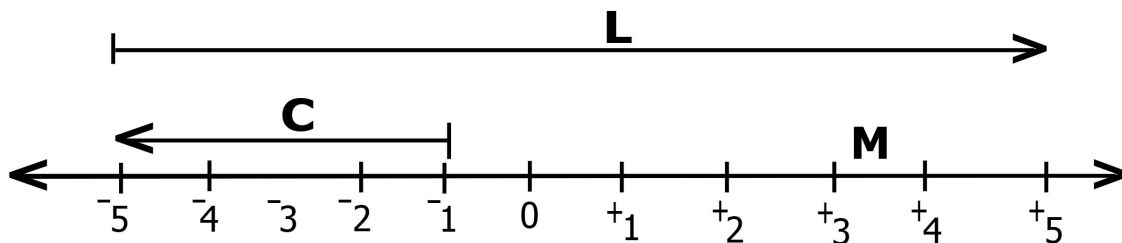
- (b) Join point **A** to **B**, **B** to **C**, **C** to **D** and **D** to **A** and name the figure formed.
(01 mark)

30. The average mass of 3 boys is 50kg. When four other boys joined them, their average mass becomes 45kg.

Find the total mass of the 4 boys who joined the group.

(04 marks)

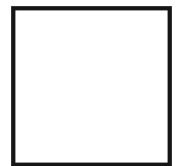
31. Study the number line and answer the question below.



- (a) Write the integer represented by;
(i) **L** = (01 mark each)

(ii) **C** =

(iii) **M** =



- (b) Write down the Mathematical statement for the above number line. (1 mark)

32.(a) Find the value of **n**.

$$\frac{2n}{5} - 2 = 6$$

(02 marks)

- (b) Find the multiplicative inverse of $\frac{2}{3}$ (02 marks)

