



# KYENJOJO DISTRICT ACADEMIC BOARD

## PRIMARY SEVEN LEAVING MOCK ASSESSMENT

### 2025

# MATHEMATICS EXAMINATION

Time allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name:.....

Candidate's Signature.....

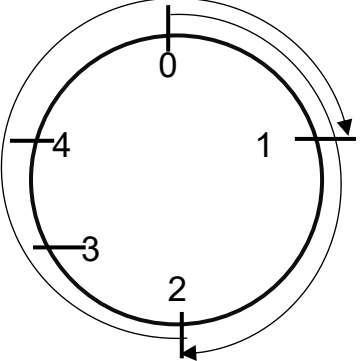
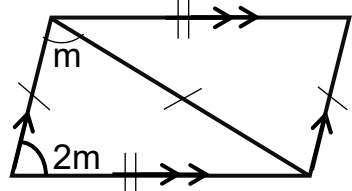
School's Name: .....

**Read the following instructions carefully:**

1. This paper is made up of two sections: **A** and **B**.
2. Section **A** has **20** questions (**40 Marks**)
3. Section **B** has **12** questions (**60 Marks**)
4. Answer **ALL** questions in both sections **A** and **B**.
5. All answers must be written in the space provided in blue or black ball point pens and ink. **Only diagrams should be done in pencil.**
6. Unnecessary crossing of answers will lead to loss of marks.
7. Any handwriting, which cannot be easily read, may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated for Examiners' use only.

FOR EXAMINER'S USE ONLY		
QN. No	MARKS	SIGN
1-10		
11-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

## SECTION A (40 MARKS)

<p>1. Subtract 98 from 100.</p>	<p>2. Write 2025 in words.</p>
<p>3. Simplify; <math>3m + n - 3m - 3n</math></p>	<p>4. How many thirds are in 3?</p>
<p>5. If <math>M = \{p, q, r\}</math>, <math>N = \{t, r, p, s\}</math>. Find <math>(M \cap N)'</math>.</p>	<p>6. Find the next number in the sequence.</p> <p>3, 6, 10, 15, 21, ____</p>
<p>7. Write the mathematical sentence for the dial below.</p> 	<p>8. Find the value of <math>m</math> in degrees in the figure below.</p> 

9. What is  $12\frac{1}{2}\%$  of 40?

10. Work out;  $\begin{array}{r} 321 \text{ five} \\ + 31 \text{ five} \\ \hline \end{array}$

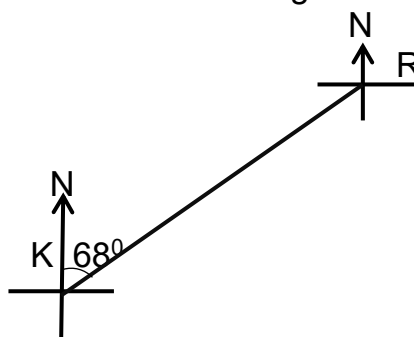
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11. Solve;  $3x - 1 = 14$

12. What is the square of 0.4?

13. What is the smallest number that you will divide by either 4 or 6 and you get 2 as a remainder?

14. Find the bearing of K from R.



15. Kaahwa exchanged a shs. 2000 note for sh. 200 coins. How many coins did he receive?

16. Find the mean of  $2m$ , 7,  $3m-1$ , 10 and 4.

17. If the length of the straight edge of a semi-circle is 63cm, what is the length of the curve of the circle?

18. In 2020, a poultry farmer collected 4340 eggs in a month of February. Find the number of eggs collected each day.

19. What is the length of line AB below in millimetres?



20. A mother is 5 times the age of her daughter. Their total age is 42 years. Find the daughter's age.

### SECTION B (60 MARKS)

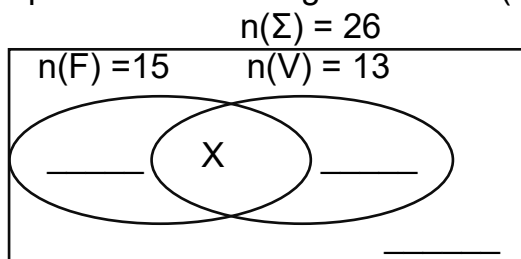
21. (a) What is the place value of 2 in the number  $1234_{\text{five}}$ ? (1 Mark)

(b) Find the value of 3 in the number above. (2 Marks)

(c) Convert  $1001_{\text{two}}$  to base ten. (2 Marks)

22. In a group of 26 players, 15 played football (F), 13 played Volleyball (V), x played both games while 3 did not play any of the two games.

(a) Complete the venn diagram below. (3 Marks)



(b) Find the value of x. (2 Marks)

(c) Find the probability of selecting a player who played only one game. (2 Marks)

23. (a) Work out  $\frac{0.14 \times 0.36}{0.06 \times 0.7}$  (3 Marks)

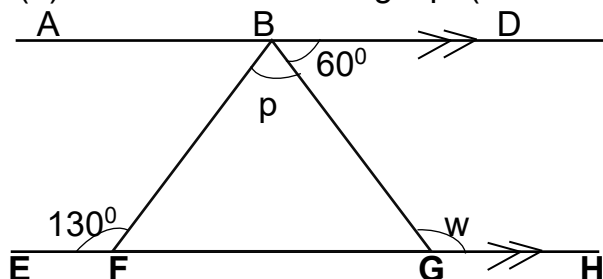
(b) Write 253.147 in expanded form using powers. (2 Marks)

24. Complete the shopping bill table below. (5 Marks)

Item	Quantity	Unit cost	Total cost
Blue band	$\frac{1}{2}$ kg	Sh. 9600	Sh. _____
Bread	3 loaves	Sh. 3500	Sh. _____
Tea leaves	$\frac{1}{4}$ kg	Sh. _____	Sh. 2500
Sugar	_____ kg	Sh. 4400	Sh. 17600
Total cost			Sh. _____

25. Line AD is parallel to line EH. Angle EFB is  $130^\circ$  and angle DBG is  $60^\circ$ .

(a) Find the value of angle p. (3 Marks)



(b) Calculate the value of angle  $w$ . (2 Marks)

26. The table below shows the number of pupils and their performance.

Marks	45	50	60	80	70	85
No. of pupils	3	2	1	2	1	1

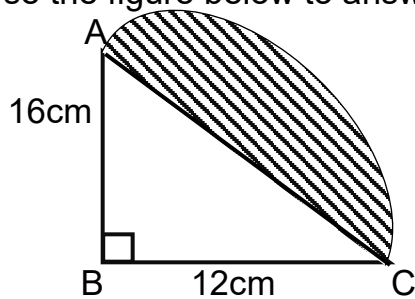
(a) Calculate the range of the marks.  
(1 Mark)

(b) Find the mode. (1 Mark)

(c) Find the average mark of the pupils.  
(3 Marks)

27. Jane, Joseph and Joshua shared some money in the ratio of 3:4:5 respectively. If Joseph got sh. 16000, how much did the three share? (3 Marks)

28. Use the figure below to answer questions about it.



(a) Find the length of line AC. (2 Marks)

(b) Calculate the area of the shaded part. (Use  $\pi = 3.14$ ) (3 Marks)

29. The interior angle is three times the exterior angle of a regular polygon.

(a) Calculate the size of the exterior angle.  
(2 Marks)

(b) Name the polygon. (3 Marks)

30. A taxi left town P for town Q at 10:30am at a speed of 120km/h. It took the taxi  $3\frac{1}{2}$  hours to reach town Q.

(a) At what time did the taxi reach town Q? (2 Marks)

(b) If the taxi returned to town P at a speed of 70km/h, how long did the return journey take? (3 Marks)

31.(a) If  $m = \frac{3}{4}$  and  $n = \frac{2}{3}$ , find the value of  $\frac{m}{n}$ .  
(3 Marks)

(b) Solve for t;  $-2(t - 5) < 4$ . (2 Marks)

32. Town N is 50km East of town M. Town Q is 80km from N on the bearing of  $120^\circ$ .

(a) Draw a sketch diagram showing the three towns. (1 Mark)

(b) Construct an accurate diagram using a scale of 1cm to represent 10km. (3 Marks)

(c) Find the shortest direct route between town M and Q. (1 Mark)

**END**

