HILLSIDE PRIMARY SCHOOL-NAALYA

PRE-REGISTRATION EXAMINATIONS

2025

MATHEMATICS (Set Three)

Time Allowed: 2 Hours 30 Minutes

Name: .....

Stream: .....

Read the following instructions carefully

1. The paper has **two** sections: **A** and **B**.
2. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
3. **All** the working must be done using a blue or black ball-point pen or fountain pen. Diagrams must be drawn in pencil.
4. **Calculators** are not allowed in the examination room.
5. Unnecessary changes of work may lead to **loss** of marks.
6. Any handwriting that cannot easily be read may lead to loss of marks.
7. **Do not** fill anything in boxes indicated: **"For Examiners' Use Only"** and those inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXRS' NO
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
Total		

Turn Over

SECTION A: (02 marks each)

1. Work out: 92 + 28

2. Write **40294** in words.

3. Find the next number in the sequence below:

   1, 4, 9, 16, 25, _____

4. Simplify: $^{-}12 - {}^{-}7$

5. Draw a Venn diagram showing learners (L) and teachers(T) in a school(S)

6. Work out (9 x 150) – (50 x 9) using distributive property.

7. How many $\frac{1}{2}$ kg packets of sugar can be got from 7kg?

8. Subtact: $\frac{2}{3} - \frac{1}{4}$

9. Convert 5.4km to metres

10. Using a ruler, a pencil and a pair of compasses only, construct an angle of **120^0**

11. How many proper subsets are in a set with 5 elements?

12. Work out 4 – 5 = _____(finite 7)

13. Find the Lowest Common Multiple (**LCM**) of 12 and 16.

14. Solve: $7 - 2y = 19$

15. Find the mean of 3k, 2k+4 and k+5

16. Change 114_{five} to a decimal base.

17. Write 149 in Roman numerals.

18. Simplify: $8p - 4m - 3p + 9m$

19. An examination started at 7:30am and ended at 10:00am. How long did it take?

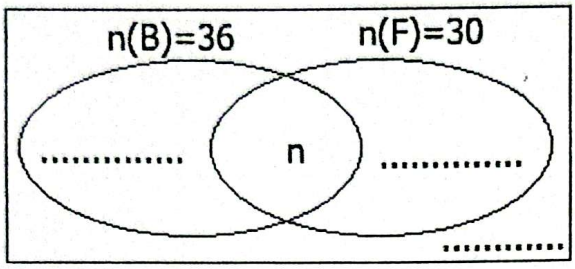
20. Find the value of y in $2^{3y} \times 8 = \frac{1}{512}$

SECTION B: (60 Marks)

21. At a birthday party attended by 63 guests, 36 guests ate beef (B), 30 guests ate fish (F), **n** guests ate both beef and fish while 2 guests did not eat any.

a) Represent the above information on a Venn diagram. ***(03 marks)***

$n(\varepsilon) = 63$



b) Find the value of n ***(02 marks)***

c) Find the probability of selecting a guest who did not eat fish.
(01 mark)

22. Given the digits 6, 0,5 and 2,

a) Write the smallest 4-digit numeral formed using the digits above
(01 mark)

b) Form the biggest 4-digit numeral using the digits above.

(01 mark)

c) Find the sum of the smallest and the biggest numeral formed in (a) and (b) above. ***(02 marks)***

23. The sum of **three** consecutive even numbers is 60.

a) Find the numbers. ***(04 marks)***

b) Calculate their range. ***(01 mark)***

24. a) Work out:

$$\begin{array}{r} 2\ 4\ 1_{\text{five}} \\ +\ 3\ 2_{\text{five}} \\ \hline \\ \hline \end{array}$$

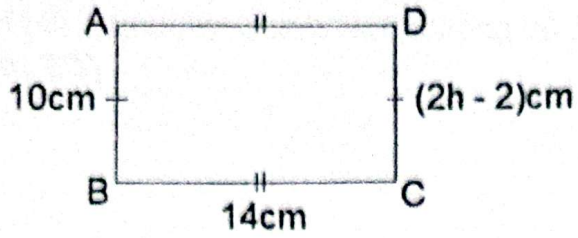
(02 marks)

b) Find the value of k in $42_k = 26_{ten}$. ***(03 marks)***

25. Paul went to the shop and bought the following items;
3 litres of milk at sh.2000 each litre.
$2\frac{1}{2}$ kg of rice at sh.4,000 per kg.
2 loaves of bread at sh.4,500 each.
a) Calculate his total expenditure. ***(04 marks)***

b) Work out his change if he went with 3-ten thousand shilling notes ***(01 mark)***

26. Below is a rectangle. Use it to answer questions about it.



a) Find the value of h ***(02 marks)***

b) Calculate the area of the figure. ***(02 marks)***

c) Work out the perimeter of the figure. ***(02 marks)***

27. In an interview of 20 questions, 5 points were being awarded for every correct response and 2 points were being deducted for every wrong response. If a contestant got 65 points, how many responses did he fail?
(05 marks)

28. a) Simplify: $\frac{1}{2} - \frac{1}{3} + \frac{1}{4}$ ***(02 marks)***

b) Work out: $\frac{0.18 \times 0.15}{0.5 \times 0.6}$ ***(03 marks)***

29. A car left Masaka at 3:00pm and reached Kampala at 5:00 pm.

a) How long did the journey take? ***(02 marks)***

b) If the car was moving at 65km/hr, calculate the distance between Masaka and Kampala. ***(02 marks)***

30. The table below shows marks scored by pupils in a test.

Marks	70	**k**	80	90
Number of pupils	2	4	3	1

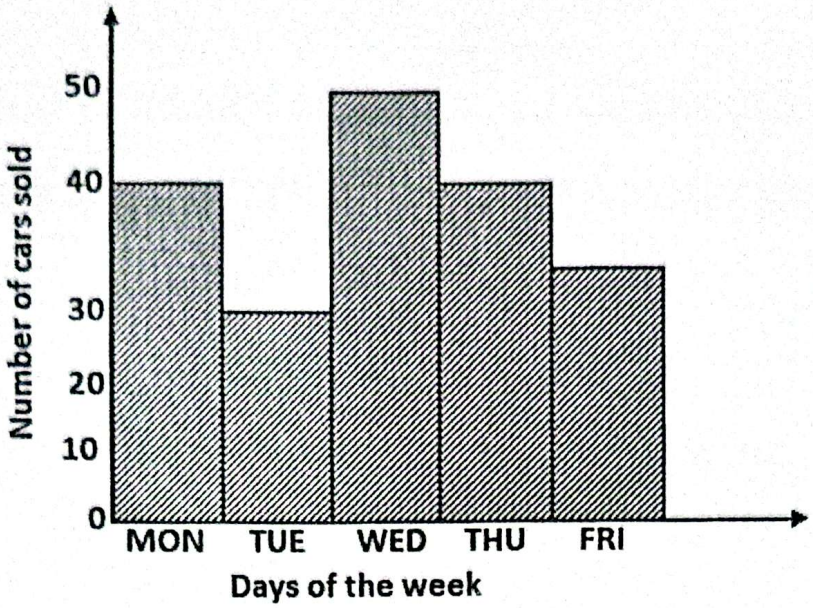
a) How many pupils did the test? ***(02 marks)***

b) Find the value of **k** if the mean mark is 67. ***(02 marks)***

31. a) Using a ruler, a pair of compasses and a pencil only, construct a triangle **QRS** where angle QRS = 90^0, QR = 6Cm and QS = 5cm ***(04 marks)***

b) Measure angle SQR (***01 mark***)

32. The graph below shows the number of cars sold by Tata Uganda in a week.



a) On which day was the lowest number of cars sold? ***(01 mark)***

b) Find the range of the cars sold. ***(02 marks)***

c) Calculate the average number of cars sold in a week. ***(02 marks)***

END