HILLSIDE PRIMARY SCHOOL-NAALYA

PRE-REGISTRATION EXAMINATIONS

2023

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		

SECTION A (02 *Marks each*)

1. Add: 57 + 43

2. Write **95048** in words

3. Find the supplement of 75^0

4. Solve 3(m+2)=14

5. The cost of 4 sweets is sh.1200. Find the cost of 9 similar sweets .

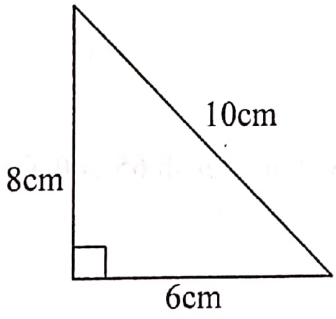
6. Simplify: $^{-}9 - {}^{-}4$

7. Write **249** in Roman numerals.

8. How many $\frac{1}{2}$ litre bottles can be obtained from a 7 litre jug?

9. Draw a Venn diagram to show that all chairs(C) are furniture(F).

10. Find the perimeter of the shape below



11. Express 75% as a simplified fraction.

12. Using distributive property, simplify (2.7 x 13) + (2.7 x 17)

13. Using a pencil, a ruler and a pair of compasses only construct an angle of 60^0

14. Change 124_{five} to base ten

15. Amon bought a toy car at sh.47,000 and later sold it at sh.65,000. Calculate his profit.

16. Find the value of p in $2^p \div 8 = \frac{1}{128}$

17. Find the range of 13, 7, 40, 71 and 25

18. Find the GCF of 24 and 18

19. How many lines of folding symmetry has a rectangle? (Draw and show them)

20. Work out: $\frac{3}{4} - \frac{2}{5}$

SECTION B (60 Marks)

21. At a party attended by 180 guests, $\frac{4}{9}$ were served water and the rest were served soda.

a) What fraction of guests were served with soda? **(02*marks*)**

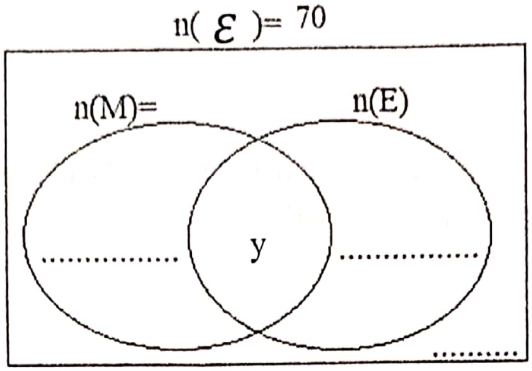
b) How many more guests were served with soda than water? **(03*marks*)**

22. The sum of three consecutive odd numbers is 39. Find the numbers.

(05*marks*)

23. In a class of 70 pupils, 45 like milk (M), 30 like eggs (E) ,y like both foods while 3 pupils like neither.

a) Complete the Venn diagram below **(03*marks*)**



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

24. Mary, Grace and Gillian shared some money in the ratio of 3:2:5 respectively

a) If Grace got sh.60,000. Find their total share. **(03*marks*)**

b) How many more money did Gillian get than Grace? **(02*marks*)**

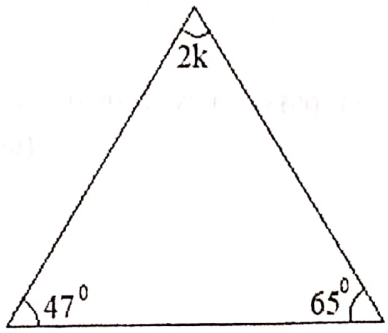
25a) Two bells ring at intervals of 30 minutes and 40 minutes respectively. After how many minutes will the two bells ring together? **(03*marks*)**

b) If they start together at 11:25am,at what time will they ring together again?**(02*marks*)**

26 a) Work out: $\frac{2}{3} - \frac{1}{2} + \frac{1}{4}$ **(02*marks*)**

b) Evaluate: $\frac{0.18 \times 2.4}{0.8 \times 0.9}$ **(03*marks*)**

27a) Find the value of h in the figure below. **(03*marks*)**



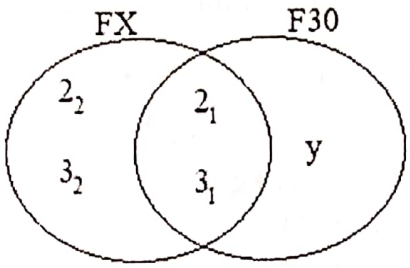
b) What angle is two thirds of its supplement? **(02*marks*)**

28.A geometry set costs three quarters as much as a book. A pen costs sh.500 less than the cost of a book. If their total cost is sh.6100, find the cost of each item? **(05*marks*)**

29. a) Using a ruler, a pencil and a pair of compasses only, construct a rectangle PQRS where line PQ=9cm, line PS=5cm **(04*marks*)**

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

30. Study the Venn diagram below and answer the questions that follow;



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

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

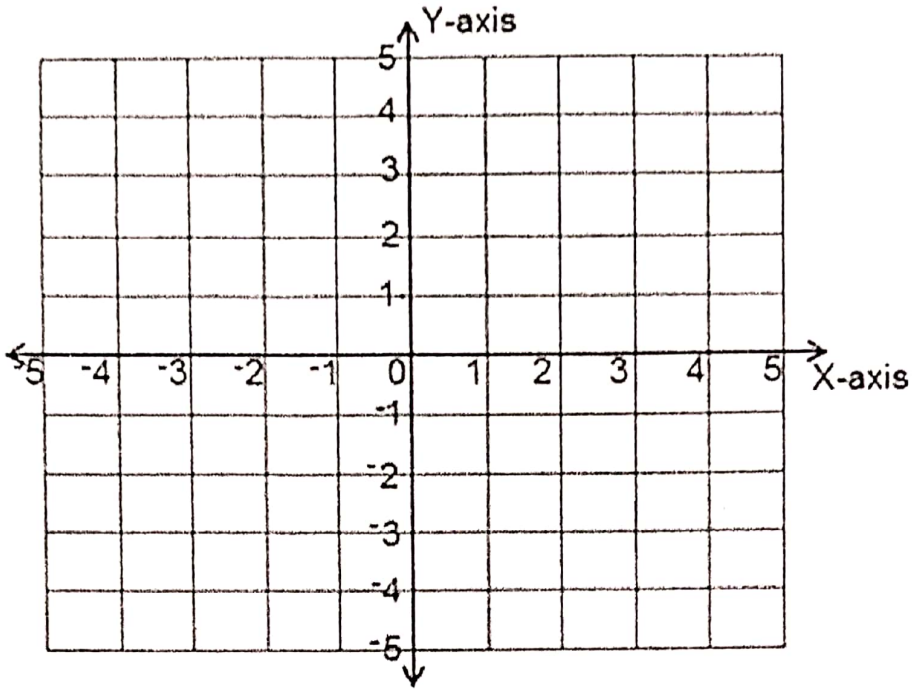
c) Find the LCM of Fx and F30 **(02*marks*)**

31. Goloba went shopping and bought the following items.

- 3 kg of meat at sh. 10,500 per kg.
- $2\frac{1}{2}$ kg of cooking oil at sh. 1500 for every half litre.
- 250 gm of ghee at sh. 28,000 per kg.
- 2 bunches of matoke at sh. 50,000.

What was his total expenditure? **(05*marks*)**

32. a) Plot P(0,3), Q(-4,-3), R(3,-3) on the grid graph below; **(03*marks*)**



b) Join the points P to Q, Q to R, R to P and find the area of the figure formed.