

#### HILLSIDE PRIMARY SCHOOL

## **BEGINNING OF TERM TWO EXAMINATIONS**

#### 2024

#### **MATHEMATICS (SET NINE)**

Time Allowed: 2 Hours 30 Minutes

Index No.											
Candidate's l	Name										 
Candidate's Signature											
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### Read the following instructions carefully:

- The paper has two sections: A and B. Section A has 20 questions and Section B has 12 questions
- Answer all questions. All answers to both sections A and B must be written in the spaces provided.
- All working must be done using a blue or black ball-point pen or fountain pen. Any work written in pencil other than graphs and diagrams will not be marked
- No calculators are allowed in the examination room.
- Unnecessary changes in work may lead to loss of marks. Any handwriting that cannot easily be read may lead to loss of marks.
- 6. Do not fill anything in boxes indicated: "For Examiners' Use Only" and those inside the 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							

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## **SECTION A: 40 MARKS**

# Answer all questions in this section Questions 1 to 20 carry 2 marks each

1. Work out: 48 ÷ 2

2. What angle is  $\frac{2}{6}$  of its supplement?

3. Express CMLXXIX in Hindu Arabic.

4. Find the median of the integers  $^{+}8$ ,  $^{-}1$ .  $^{-}6$ , 0.  $^{+}3$ , 2.

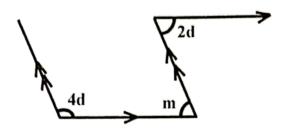
5. A mango tree is the 18<sup>th</sup> from either side of the line of trees marking the perimeter fence of Kiwatule recreation centre in the south. How many trees are in the south?

6. The price of a blanket was increased by 20%. If its new price is sh. 60,000. Find the old price.

7. Round off 99.645 to the nearest whole number.

8. Subtract: 3(y - 2) from 10(y - 5).

9. Find the value of d in the diagram below.



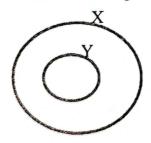
10. Abigail goes shopping every 8 days and Ariadne every 5 days. Ariadne and Abigail both had shopping today. How many days will it be until they go shopping together again?

11. Express 0.42222..... as a vulgar fraction.

12. A shop attendant bought 5 grosses of pencils at sh. 700 each pencil. How much did he spend to buy these pencils.

13. A cyclist covers a distance of 480km at a speed of 120m/hr. how many hours more will he use if he drives at 60km/hr. to cover the same distance.

14. In the Venn diagram below, shade (X - Y)'.



15. The Kampala festival 2024 started at 10: 45 a.m. on Friday and stopped at 4:30 a.m. of the next day. For how long did it take place.

16. A fair dice was rolled once. What is the probability that at least a 2 appears on top?

17. Find the 46<sup>th</sup> triangular number.

18. Find the number whose scientific notation is  $3.84 \times 10^{-3}$ .

19. 23bags of cement of 50 kilograms each were bought by the Engineer to construct the new toilets behind the upper classroom block. Express the total number of kilograms as tonnes.

20. Using a ruler, a pencil and a pair of compasses only construct an angle of  $22\frac{1}{2}$ °.

#### **SECTION B: 60 MARKS**

# Answer all questions in this section Marks for each question are indicated in the brackets

- 21. A trader borrowed sh. 800,000 from a bank that offers an interest rate of 5% per annum for 18 months.
  - a) How much interest did she pay to the bank.

(03 marks)

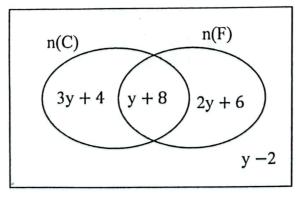
b) Calculate the amount of money the trader paid the bank at the end of 18 months. (02 marks)

22. a) A square field is  $400 \mathrm{m}^2$ . What is the length of its side?(02 marks)

b) Solve for p.  $6^{2p+1} \div 36 = 216$ .

(02 marks)

23. The Venn diagram below represents the number of guests in an end of year party who like Chicken (C), Fish (F) and those who do not like any of the two types of food. Use it to answer questions that follow.



a)	If	the	numb	er of	those	who	like	fish	only	differ	from	those	who
	do	on't	like an	y of t	he two	foods	by '	13. F	ind th	ie valu	e of y	<b>'.</b>	
		(03	3 mark	s)									

b) How many guests like neither of the two types of food? (02 marks)

24. a) Find the product of the value of 7 and the place value of 4 in the number 3725. 241.(02 marks)

b) Given digits 3, 0, 9. Form all possible 3 digit numbers using the digits given. (02 marks)

25. a) Solve and write the solution set for 2 (4 - h) < 16. (03 marks)

b) Alpha is 3 times as old as Sheldon now and he is (2f) years old now. In 10 years time the difference in their age will be 12 years. How old is Sheldon? (03 marks)

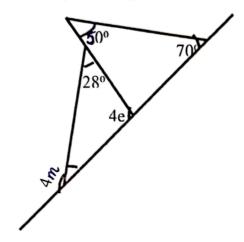
**26.** a) Simplify: 
$$\frac{5.28}{0.12} + \frac{1.2}{0.6}$$

(03 marks)

b) Simplify: 
$$\frac{4}{5} \times \frac{3}{7} \div \frac{9}{14} + 2\frac{7}{15}$$

(03 marks)

27. a) Study the diagram below and answer the questions that follow.



(I) Find the value of e.

(02 marks)

(II)Find the value of m.

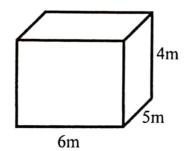
(02 marks)

c) The exterior angle of a regular hexagon is 2h + 4. Find the value of h.
 (02 marks)

- 28. A motorist drove from town P to town Q at an average speed of 80km/hr. for 3 hours. At town Q he rested for two hours and continued to town W at a steady speed of 120km/hr. for 3 hours.
  - a) Calculate the total distance covered by the motorist from town P to W. (3marks)

b) Work out the average speed of the motorist for the whole journey. (02 marks)

29. How many 500litre jerrycans of juice can be obtained from a rectangular tank of 6m by 5m by 4m? (05 marks)



30. Complete the magic square below.

(04 marks)

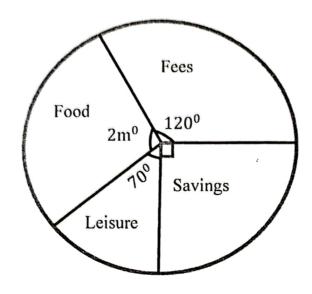
1	а	14	4
В	6	7	9
8	10	С	5
13	3	2	d

31. a) Using a ruler, a pencil and a pair of compasses only construct a triangle LMN. Where line LM = 8cm, angle LMN =  $60^{\circ}$  and angle MLN =  $45^{\circ}$ .

(04 marks)

c) Drop a perpendicular line from point N to meet line LM at B.
 (01 mark)

32. The pie chart below shows how a cleaner spends his monthly salary. Use it to answer questions that follow.



a) Find the value of m.

(02 mark)

b) If he spends sh. 20, 000 less on leisure than on food. Find his salary.

(03 marks)