ST. AGNES CATHOLIC GIRL'S BOARDING PRIMARY SCHOOL, NAGGALAMA
PRIMARY SEVEN PRE MARATHON SET SIX , 2024

MATHEMATICS

Time Allowed: 2 hours 15 minutes

Index No. [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

Candidate's Name ....

Candidate's Signature ....

EMIS NO. ....

District Name...

Read the following instructions carefully:

1. This paper has **two** sections: A and B. Section A has 40 questions and Section B has **15** questions.

2. Answer all questions. **All** answers to both sections A and B must be written in the spaces Provided.

3. **All** answers must be written using a blue or black Ball-point pen or ink. Any work written in pencil other than graphs, pictures, diagrams and maps, will **not** be marked.

4. Unnecessary changes of work may lead to **loss** of marks.

5. Any handwriting that cannot easily be read may lead to **loss** of marks.

6. Do not fill anything in the boxes indicated: "For

7. Examiners' Use Only" and those inside the questions paper.

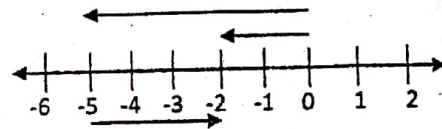| FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXRS' NO.
1 – 10		
11 – 20		
21 – 30		
31 – 40		
41 – 43		
44 – 46		
47 – 49		
50 – 52		
53 – 55		
Total		

1. Work out: 123 x 3	2. In the numeral 2m76, the value of m is 300. Which digit is represented by m?
3. Set Q= {r, e, s, t}and Set P= {s, e, t}. Show the above sets on the Venn diagram below.	4. Write a mathematical sentence shown on the number line below.
5. Express 1735 hours in 12-hour Clock system.	6. It is 250km from town Q to town R. Find the number of Hm between the two towns.
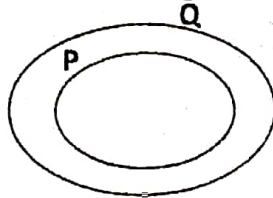
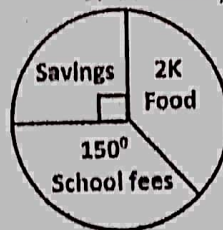|	
7. Find the value of K given that $5^k \times 2^3 = 200$	8. A vehicle covered 90km in 45 minutes. Find its speed in Km/h.
9. Solve: $2a^2 = 8$	10. Write the next number in the sequence: 4, 8, 14, 22, 31, ———
11. Represent 2003 on the abacus. TH H T O	12. The pie chart below shows how a man uses his monthly income of Sh. 360,000. Savings 2K Food 150^0 School fees Find the value of K in degrees.

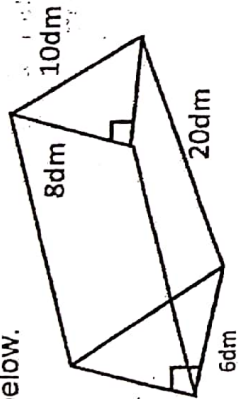|	
13. Find the smallest number that is exactly divisible by 9, 6, or 8	14. Use a pair of compasses and a ruler only to construct an angle of 150^0
15. Given that a = 2 and b = 3 Find the value of $2b^2 + (2a)^2$	16. James, Alice and John weigh 50kg, 60kg and n respectively. If their average weight is 65kg. Find the value of n.
17. Mary has two Uganda coins, there is a cow on one coin and on another, there is a fish. Find how much money she has altogether.	18. Find the size of angle marked r in the figure below.

For question 18, the figure shows angles 70^0, 60^0, 60^0 and a right angle, with angle r marked.
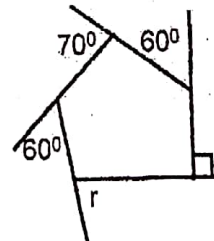
19. Find the volume of the prism below.

20. Express $\frac{5}{8}$ as a decimal.

SECTION B (60 MARKS)

21. 30% of the pupils in a class like Mathematics, 10% like SST, 40% like English and the rest like Science.

(a) What percentage of the pupils like Science?

(2marks)

(b) How many more pupils like English than SST if there are 60 pupils in the class

(3marks)

5

22. Below is the bus' time table. Use it to answer the questions that follow.

Station	J	K	L	M
Arrival		10:50 am	12:40pm.	2:15pm
Departure	9:45am	11:00am	12:45pm	

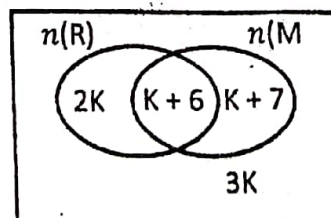(a) At what time does the bus leave town K?

(b) How long does the bus take to travel from K to L   (2marks)

(c) It is 315km from **J** to **M**. calculate the bus' average speed for the whole journey.   (3marks)

23. The Venn diagram below shows the number of farmers in a club who grow rice (R), millet (M) and other crops.

$n(R)$ $n(M$

2K   (K + 6)K + 7

3K

(a) Find the value of K given that the numbers of farmers who grow millet only are half those that grow rice. **(3marks)**

(b) Find the number of farmers who do not grow millet **(2marks)**

24. The mean of 3 consecutive odd numbers is 17. Find the numbers given that the largest number is K **(5marks)**

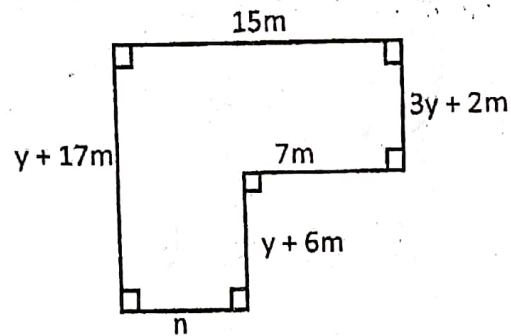25. The interior angle and the exterior angle of a regular polygon are in the ratio of 4:1

(a) Find the number of sides of the polygon **(3marks)**

(b)   Find the sum of the interior angles of the polygon   **(2marks)**

26.   The figure below shows a school garden

15m

3y + 2m

y + 17m   7m

y + 6m

n

(a)   Find the value of y   **(3marks)**

(b)   Find the length of the garden marked n   **(2marks)**

8

27. Town P is 300km from town Q on a being of 070^0 and Town R is 250km from town P on a bearing of 315^0. Use a scale of 1cm: 50km and draw an accurate diagram showing the positions of the towns. **(5marks)**

28. The cost of a book is $\frac{3}{10}$ of the cost of a mathematical set and a pencil costs Sh. 1300 less than the cost of a book.

    The total cost of the 3 items is Shs 6,700. Find cost of a book. **(5marks)**

29. In a certain shop; $2\frac{1}{2}$ kg of rice cost sh.10,000, 500g of sugar cost sh.1,900 and a litter of cooking oil costs sh.8,000.

   (a) Find the total amount of money one will pay if he buys 1kg of rice, 1kg of sugar and 250ml of cooking oil. **(4marks)**

   (b) Find how much his balance will be in case he goes with a fifty thousand shillings note. **(1 Mark)**

30. In a class, for every 2 boys, there are 3 girls. Each girl is to pay sh.20,000 for a skirt. If sh.600,000 is expected to be collected from all the girls, how many pupils are in the class? **(4marks)**

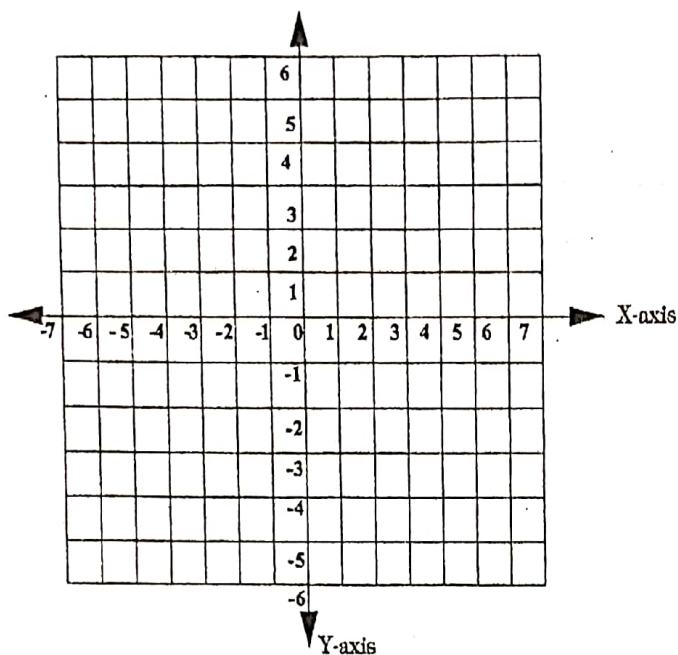31. The figure below shows a cubical tank with some water.
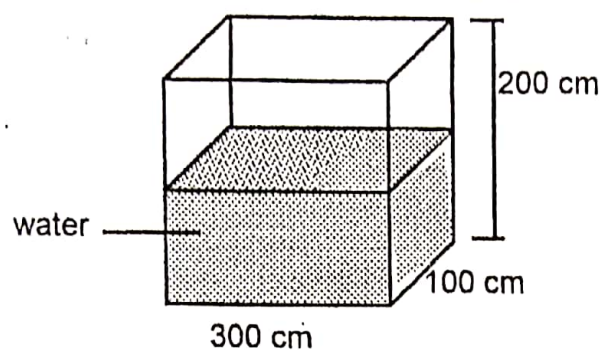
(a) Find the volume of the tank when it is full? (2marks)

(b) If there are 1500 litres in the tank, find the height of the tank that is not occupied by water (3marks)

32. On the grid graph below, plot points

P (-2,4), Q (-4,-1) and R (-2,-4)   **(3marks)**

(a) Plot point S on the above grid and join the piloted points to form a kite

(2marks)

(b) How many lines of folding symmetry does the plotted figure have?

(1mark)

END

12