MANTLE DAY AND BOARDING PRIMARY SCHOOL –LIRA

PRE-PRIMARY LEAVING EXAMINATION SET XVIII, 2023

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

District ID No:

Read the following instructions carefully:

1. Do not write your **school** or **district name** anywhere on this paper.
2. This paper has **two** sections: **A** and **B**. Section **A** has **20** questions and Section **B** has **12** questions. The paper has **16 printed pages** altogether.
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** working must be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than graphs and diagrams will **not** be marked.
5. **No calculators** are allowed in examination room.
6. Unnecessary **changes** in your work and hand writing that cannot easily be read may lead to **loss** of marks.
7. Do **not** fill anything in the table indicated: **"For Examiners' Use Only"** and boxes inside the question paper.

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

SECTION A : 40 MARKS.

Answer **all** *questions in this section.*

Questions **1** *to* **20** *carry* **two** *marks each.*

1. Multiply: 213 x 3

2. Simplify: 4p — (3 + p)

3. Find the supplementary angle of $(r + 80)^0$

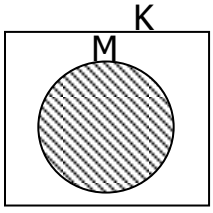
4. Divide: $\frac{7}{9} \div \frac{5}{18}$

5. A trader sold a hen at Shs. 24,000 making a profit of Shs. 6000. What was the cost price of the hen?

6. Calculate the difference between the values of **3** and **1** in the numeral 143.

7. Work out: $\frac{3}{5}$ of 15 — 16 ÷ 4

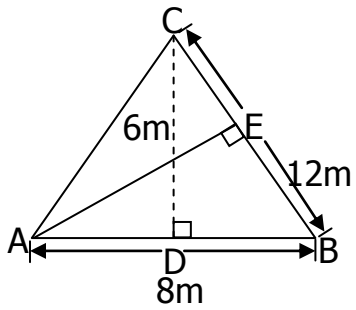
8. Describe the unshaded region in the Venn diagram below.



9. A mathematics contest that lasted $2\frac{1}{2}$ hours ended at 2:30p.m. When did it start?

10. Write "Five hundred ninety" in Roman numerals.

11. In the triangle below, calculate the length AE.

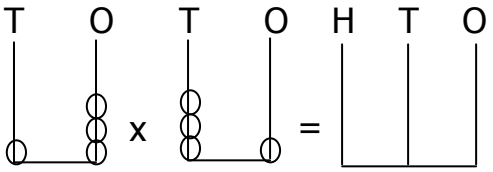


12. Tom scored 7, 10, 6, y and 4 in a test. If his mean score was 8, find the probability of Tom scoring marks below the mean.

13. Sarah was facing South East direction and turned anti-clockwise to face West. Through what angle did she turn?

14. If 4 + t = 3 (finite 6), work out the value of t.

15. Multiply:



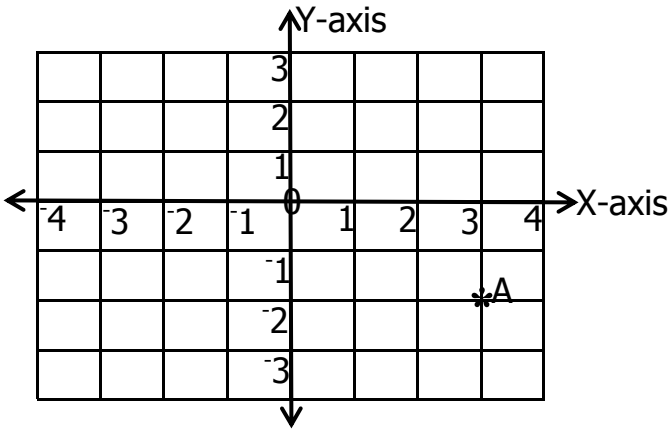
16. Determine the next two numbers in the sequence.
1, 3, 9, 27, ____, ___

17. A farmer used a barbed wire 0.88m long to fence his circular garden one complete turn.
How long is the radius of the garden in centimetres?

18. Solve for $\square$; $2\square + 3 = 18 - \square$

19. A pupil got 14 wrong answers in a test set out of 40 questions. What was his percentage mark?

20. On the grid below;
(i) State the co-ordinates for point A.



(ii) Plot the co-ordinates for K ($^{-}2$, 3)

SECTION B : 60 MARKS

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

21. If Tendo spends $\frac{1}{3}$ of his salary on fees, $\frac{2}{9}$ on care, $\frac{1}{6}$ on food and saves the rest worth Shs. 50,000. How much is Tendo's salary? *(4 marks)*

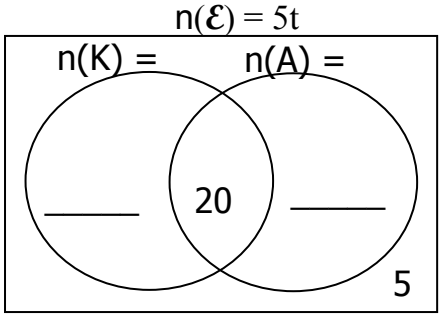
22. (a) The sum of three consecutive odd numbers is 135. Find the numbers.

(3 marks)

(b) The product of two numbers is 432 and their LCM is 72. Work out the Greatest Common Factor (GCF) of the two numbers. *(2 marks)*

23. In a group of 5t tourists, 35 visited L. Kyoga (K) only, 20 visited both L. Kyoga and L. Albert (A), 40 visited L. Albert while 5 tourists visited other lakes.

(a) Use the above information to complete the Venn diagram below. *(2 marks)*



(b) Solve for the value of t. *(2 marks)*

24. A parent went to market and bought the following items;

(i) $1\frac{1}{2}$ kg of beans at Shs. 2000 per kg.
(ii) 4 bars of soap at Shs. 3500 each bar.
(iii) A 5kg packet of rice at Shs. 20,000 per packet.
(iv) Colgate for Shs. 5000.
(a) If she was given a discount of 10% on total bill, how much did she pay?

(4 marks)

(b) If she had fifty thousand shilling note, find her change.

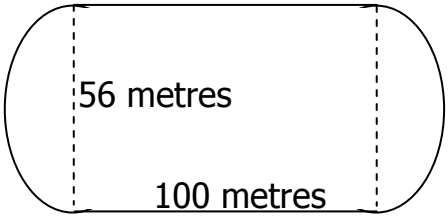
(2 marks)

25. (a) With the help of a ruler, a pencil and a pair of compasses only, construct a regular hexagon of diameter 9cm. *(4 marks)*

(b) How many lines of folding symmetry has the drawn polygon?

(2 marks)

26. The figure below represents a running truck.



(a) What area is covered by the running truck? *(3 marks)*

(b) Calculate the total distance covered by Annet when she goes round the truck $12\frac{1}{2}$ times. *(3 marks)*

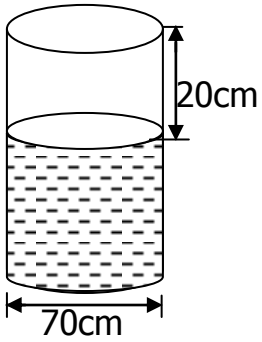
27. A taxi travelling at 60km/hr took 5 hours to cover part of the journey. The rest of the journey was covered in 2 hours at a speed of 45km/hr.
Work out the average speed of the taxi for the whole journey. *(4 marks)*

28. By selling an item to Sarah at Shs. 275,000, a trader made a profit of 10%. If Sarah sold it to Jane at a loss of 8%;

(a) How much did a trader pay for the item? *(2 marks)*

(b) At what price did Jane buy the item? *(2 marks)*

29. The tank below is $\frac{3}{4}$ full of milk.

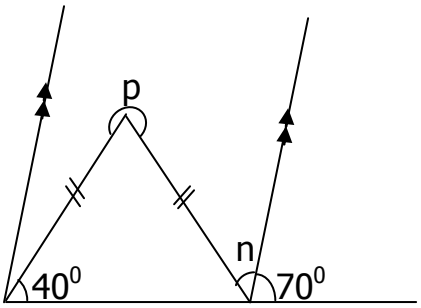


(a) Find the height of the whole tank. *(2 marks)*

(b) How many litres of milk are in the tank? *(2 marks)*

30. (a) The interior angle of a regular polygon is 90^0 more than the exterior angle. How many sides has the polygon? *(2 marks)*

(b) Use the figure below to answer the questions that follow.

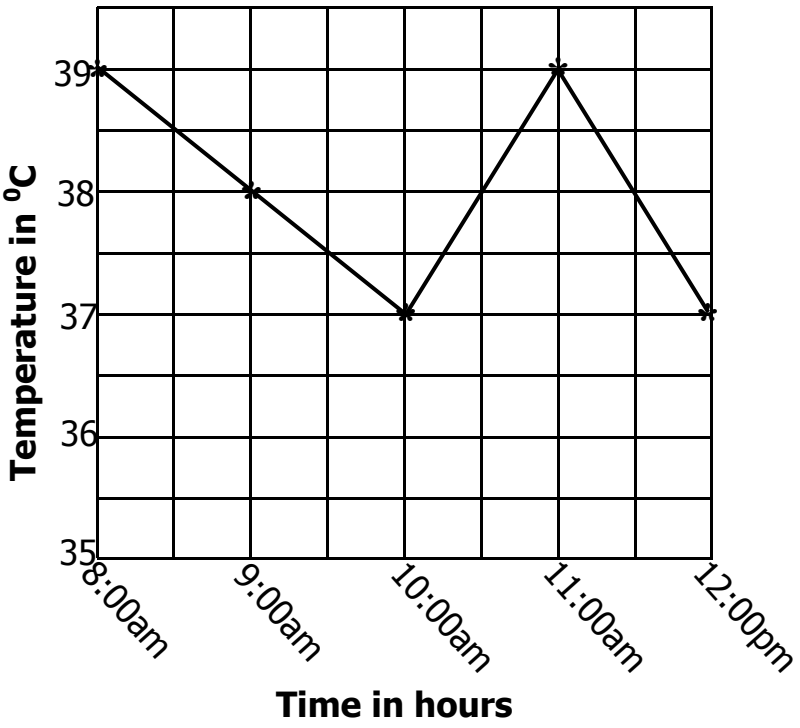


Calculate the size of the angles marked;
(i) p *(2 marks)* (ii) n *(2 marks)*

31. (a) Solve for x; $2(3x - 1) - 4(x - 1) = 8$ *(3 marks)*

(b) A father is 5 times as old as his son. After 5 years the difference in their ages will be 32 years. How old is the son now? *(2 marks)*

32. The graph below shows the temperature of a patient in a hospital taken from 8:00a.m to 12:00 noon in a day.



(a) What times of the day was the temperature of a patient least?

(1 mark)

(b) Find the range of the patient's temperature. *(1 mark)*

(c) Work out the median of the temperature recorded that day.

(1 mark)

(d) Calculate the average of the patient's temperature recorded. *(2 marks)*

END