AMURIA DISTRICT ACADEMIC PERFORMANCE IMPROVEMENT COMMITTEE.

DISTRICT PLE - MOCK 2024

MATHEMATICS

Time allowed: 2 hours 30 minutes

Random No.						Personal Number		

CANDIDATE'S NAME ……..

CANDIDATE'S SIGNATURE: ……..

SCHOOL NAME: ……

DON'T OPEN THIS BOOKLET UNTIL YOU ARE TOLD DO SO

Read the following instructions carefully

1. Do not forget to write your **school name** on the paper
2. This paper has two sections: **A** and **B**. section **A** has **20** questions and section **B** has **12** questions. The paper has **13** printed pages.
3. Answer **all** questions. **All** working for both section **A** and **B** must be shown in the spaces provided.
4. **All** answers must be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
6. Do not fill anything in the table indicated: "**FOR EXAMINERS' USE ONLY**" and boxes inside the question paper.

EXAMINER'S USE ONLY		
QNS	**MARKS**	**INITIALS**
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)

Each question carries 2 marks

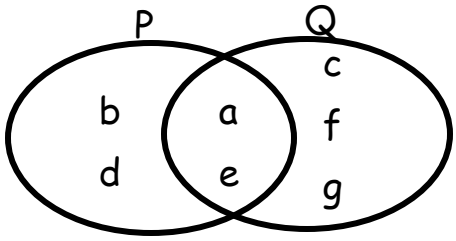
1. Work out 840 ÷ 4

2. Express DCXCVII in Hindu – Arabic numerals

3. A P.7 mathematics teacher went for his salary from the bank and he was given 100 notes in a bundle of 10,000 shillings notes numbered consecutively up to CP03499. Find the serial number of the first notes.

4. Given that: a = 2, b = 4 and c = ¯3. Find the value of –ab – 4c.

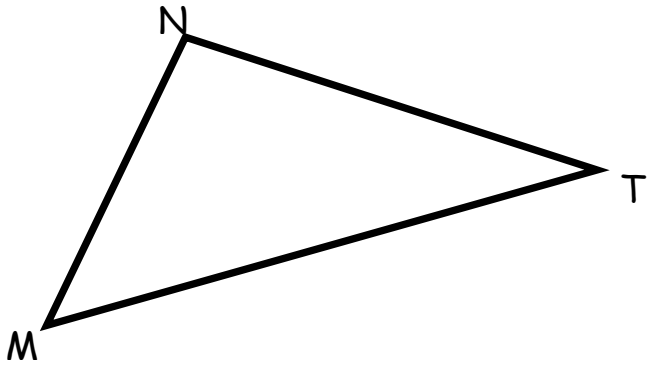
5.



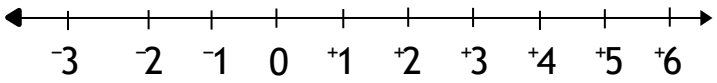
Find $\cap (P - Q)'$

6. A tall woman's stride is 1.1metres long. How many strides will she make over a distance of 1.65km?

7. Using a pair of compasses a ruler only, bisect $\angle TNM$



8. Show the operation 3 x 2 on the number line below.



TURN OVER

9. Alice measured 2kg of salt. She then divided it into packets of 125gm each. How many such packets did she get altogether?

10. When a die is tossed once, what is the chance of getting an Even – prime number showing on top?

11. Find the next two numbers in the sequence.

    9, 11, 14, 19, _____, _____.

12. In a class, the ratio of the number of the **right handed** to **left handed** pupils is 5:1 respectively. If there are 28 more **right handed** than the **left handed** pupils. Find the total number of pupils in the class.

13. The price of petrol per litre increased by $16\frac{2}{3}\%$ to shs. 5,600. Calculate its price before the increase.

14. The first half of the football match has 45 minutes. If 8 minutes were added as extra time to end it. The kick off time was exactly 4:40pm. At what time was the last whistle blown?

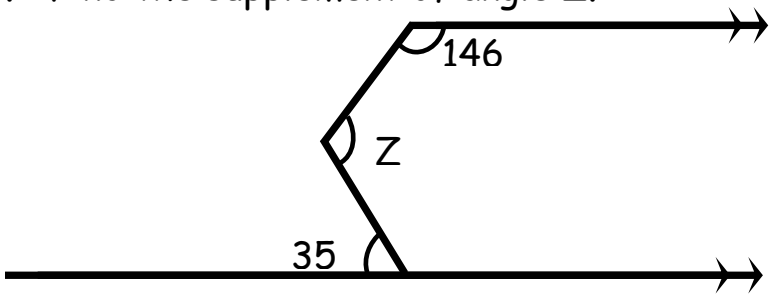
15. The exterior angle of a regular polygon at a common point is $\frac{1}{3}$ its interior angle. Find the size of each exterior angle.

TURN OVER

16. Railway station **T** is in North Western direction of Railway station **R**. Find the bearing of station **R** from station **T**.

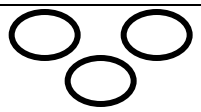
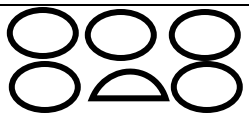
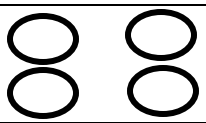
17. A serious Boda Boda rider covered a distance of 21km in only 36 minutes. Calculate his speed in km/hr.

18. Find the supplement of angle Z.



19. Solve the equation: $3y^2 + 7 = 55$.

20. The picture graph below shows details of EMIS registration of learners for the primary school.

SCHOOL	**A**	**B**	**C**	**D**
NO. OF LEARNERS				

Given that  represents 120 pupils.

Find the enrolment of school **C**

SECTION B: (60 MARKS)

21. a) Write ninety four hundreds in figures. (2marks)

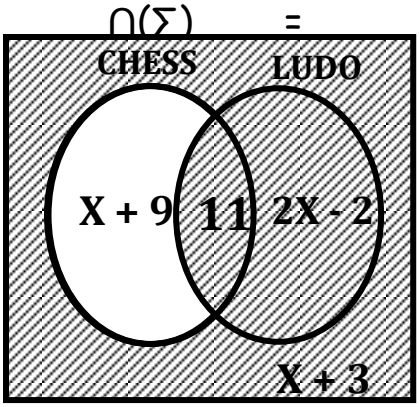
b) Write 0.00351 in scientific Notation. (2marks)

22. In an open market, the price of a cock is one and a half times the price of a hen. The difference between their prices is shs. 9,000

a) Find the price of a hen.

b) Calculate the total amount paid for a cock and two hens.

23. Use the Venn diagram below to answer questions that follow.
Given that the number of members in the shaded region doubles that in the unshaded region.



a) Find the value of X. (3marks)

b) How many members play chess in class? (2marks)

24. Lazarus deposited some amount of money in a bank that offers interest rate of 10% per annum for 2 years. If he withdrew a total amount of shs. 120,000 at the end of the period.

a) How much money did he deposit in the bank? (2marks)

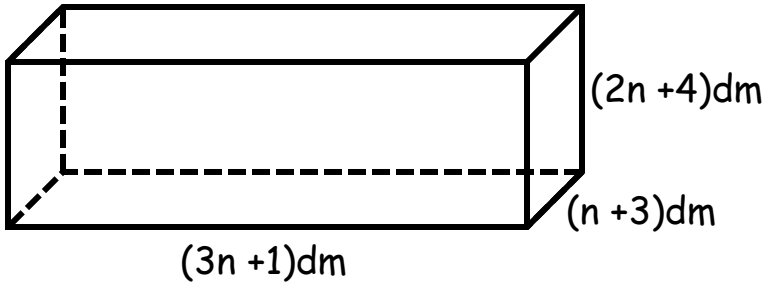
b) Calculate his interest. (3marks)

25. A wooden bed costs Shs. 20,000 more than a wooden table. If 4 tables N and 2 beds costs Shs. 220,000. Find the cost of:

a) Table. 3marks

b) Beds (2marks)

26. This is a cuboid. Given that the sum of all the edges is 104dm.



a) Find the value of **n**. (3marks)

b) Work out its volume. (2marks)

27.

Marks	65	h	35	70
No. of pupils	2	3	1	4

The table above shows marks got by P.7 candidates in a mathematical test. Use it to answer questions that follow.

a) If their mean mark is 67, find the value of **h. (**3marks)

b) Write their modal frequency. (2marks)

28. a) By use of a pair of compasses, ruler and sharp pencil only, construct ΔPXL where $\overline{PX}$ = 7cm, $\angle LPX = 45^0$ and $\angle PXL = 60^0$ (3marks)

b) Drop a perpendicular line from points L to meet $\overline{PX}$ at point N. (1mark)

c) Measure $\overline{LN}$ (1mark)

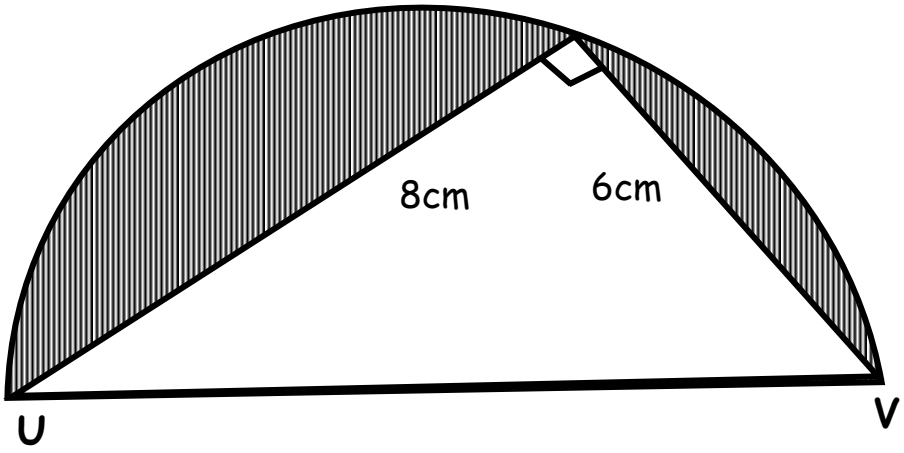
---

29. a) Subtract 3(m-2) from $\frac{2}{3}(6m-1\frac{1}{2})$

b) factorize completely $12a^2b^3+4ab^2$.

TURN OVER

30. Use the figure below to answer questions that follow.



a) Find the length $\overline{UV}$. (2marks)

b) Calculate the area of the shaded part. (4marks)

31. **PUZZLE CORNER** Complete the puzzle correctly by computing values of the unknowns. (1mark each)

P	Q	28	17
25	20	19	R
S	24	23	18
26	15	T	29

P = _____

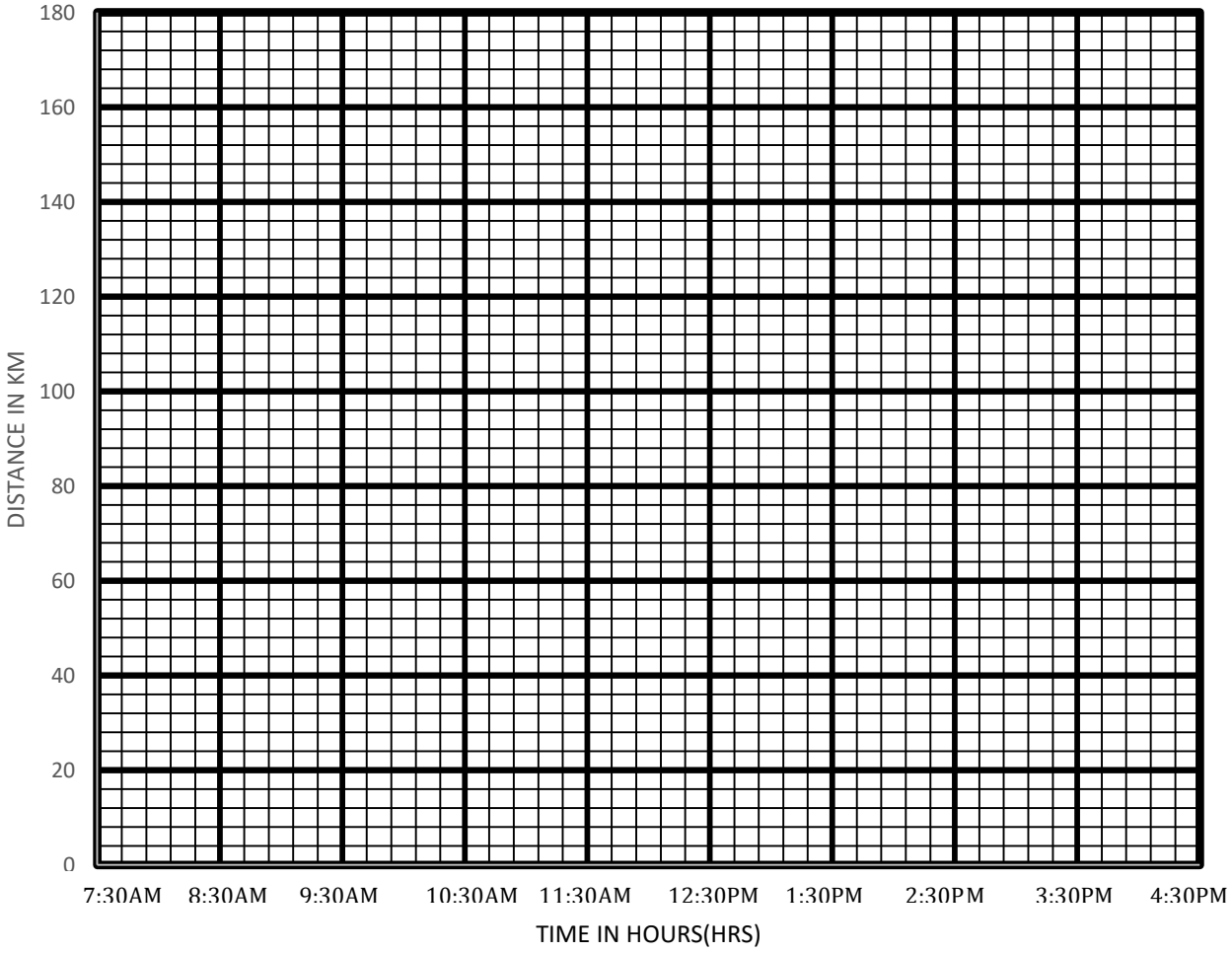
Q =_____

R = _____

S = _____

T = _____

32. The travel Graph below shows Peter's journey from home to town **W** via town **T** and back home.
Use it to answer the questions that follow.



Peter left his home at 730hrs moving at 60km/hr for only one hour to town **T**. he rested at T for one hour and continued to town **W** at 80kn/hr for one hour. He rested at W doing his business for two hours. He then returned home nonstop from 12:30pm till when reached at 2:30pm.

a) Draw the line graph on the graph to show Peter's journey. (3marks)

b) Calculate Peter's speed for the whole journey. (2marks)

END