THE E-LEARN EXAMINATIONS BOARD

PRE-PLE SET FIVE / TEN

2025

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.	Random No.						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

School Name: .....

Read the following instructions carefully:

1. Do not write your **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 **12 printed pages**.
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** the 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 the examination room.
6. Unnecessary **changes** in your work and handwriting that cannot be read easily 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		

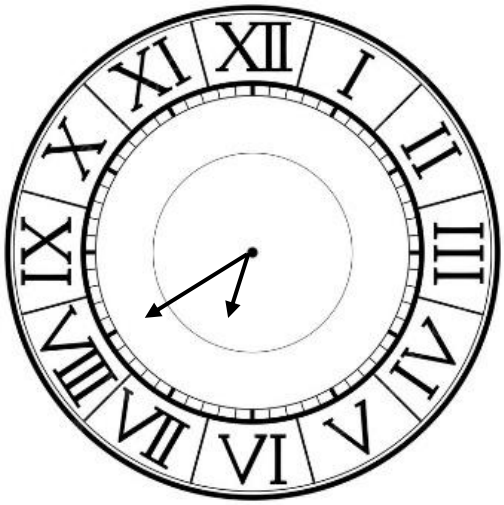
SECTION A: 40 MARKS

*Answer **all** the questions in this section.*
*Questions **1** to **20** carry two marks each.*

1. Workout 32 × 4

2. Round off 69.987 to one decimal place

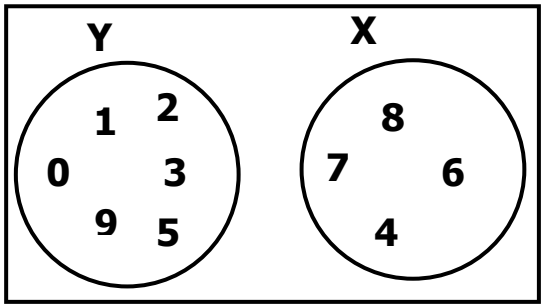
3. Write the morning time shown on the clock face below.



4. Find the sum of prime numbers between 80 and 90.

5. Express 0.243… as a fraction in its simplest form

6. From the Venn diagram below, find the number of elements in the complement set of **Y**. ∑



7. Find the mean of 2x, 0, 42, 3x-2, and 5.

8. Write two thousand four hundred three in Hindu-Arabic numeral.

9. A fair dice is tossed once. Find the probability that the number that appears on top is a triangular number.

10. Find the square of 16

Turn Over

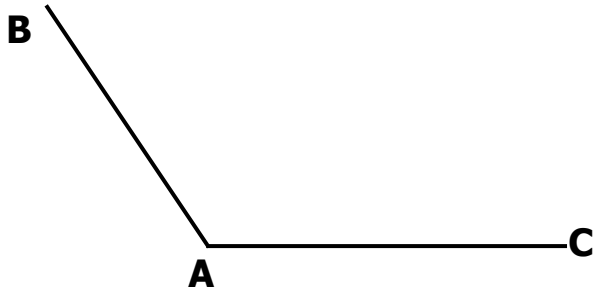
11. Serene bought 4 cakes at sh. 3600. Shalom bought 7 similar half cakes at the same rate. How much did Shalom pay for the cakes?

12. Express 108 kilometres per hour as metres per second.

13. After covering $\frac{2}{5}$ of the journey, the driver realized that 42 km were left to complete the journey. How long was the journey?

14. Solve: $\frac{y^2 \times y^3}{y^8}$

15. Using a ruler, a pencil, and a pair of compasses, bisect the obtuse angle **BAC** in the figure below.



16. How many 250 ml bottles of milk can be packed from a 6.5 litre can full of fresh milk?

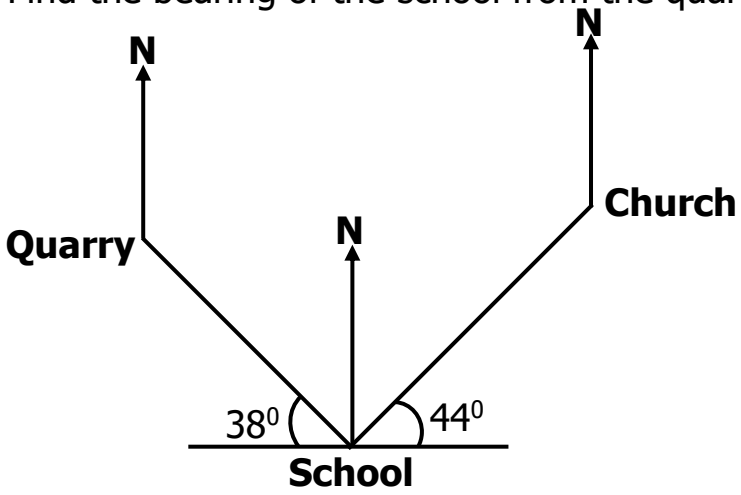
17. The exterior angle of a regular polygon is 45°. Name the polygon.

18. At a cross junction, the Benz is the eleventh car from all sides. How many cars are there altogether?

19. Simplify: $1\frac{1}{2} + \frac{2}{3}$

Turn Over

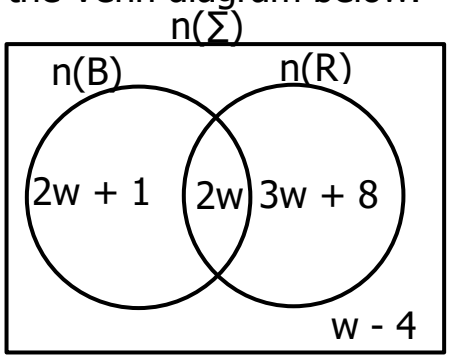
20. Find the bearing of the school from the quarry.



SECTION B: 60 MARKS

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

21. A group of football fans gathered for the UEFA Champions League between Borussia Dortmund (B) and Real Madrid (R). Every person's interest was recorded as shown on the Venn diagram below.



(a) Given that these who supported Real Madrid are twice their complement, Find the value of w. *(03 marks)*

(b) What is the probability that the owner of the Venue supported Borussia Dortmund. *(03 marks)*

22. (a) What is the place value of 2 in $4231_{\textbf{five}}$? *(01 mark)*

(b) There are 31_{seven} kinds of shoes in the box. Express this number as a ternary base numeral. *(03 marks)*

23. Two numbers **Y** and **Z** are in the ratio of 3:4. If their GCF is 6.
(a) Find the numbers *(02 marks)*

(b) Work out the LCM of the two numbers Y and Z above. *(02 marks)*

Turn Over

24. Construct a triangle **PAS** given that angle **SPA** = 60°, angle **PSA** = $67\frac{1}{2}^{0}$ and line PS = 7.2cm. *(04 marks)*

Measure line PA. *(01 mark)*

25. (a) Simplify: $\frac{0.06 \times 1.2}{0.45 \times 0.08}$ *(03 marks)*

(b) Solve $4\frac{1}{6} - \frac{3}{4}\ of\ 2\frac{2}{5}$ *(03 marks)*

26. Mr. Keefa withdrew 42 notes of Uganda Shillings numbered from APH20267 consecutively.

(a) Find the last serial number on the notes. *(02 marks)*

(b) If he had Sh. 210000, how much was each note worth? *(02 marks)*

27. (a) What angle is $\frac{2}{3}$ of its supplement? *(03 marks)*

(b) How many right angles are in a heptagon? *(02 marks)*

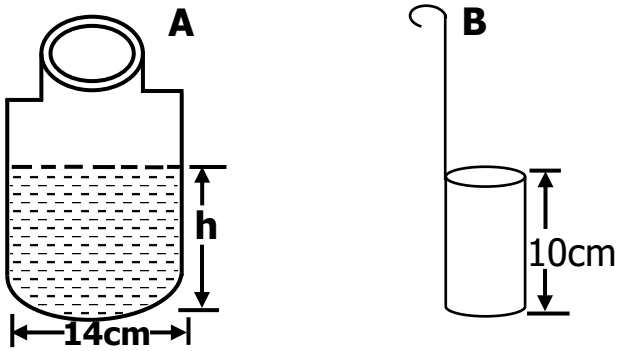
28. A counterweight was used to measure the customer's goods at the retail shop. The sugar was 6 times the counter weight's mass. The salt measured was twice the mass of the counter weight.

(a) If sugar was 3kg, how much salt was measured? *(03 marks)*

Turn Over

(b) Express the mass of the counterweight in grams. *(02 marks)*

29. Below is a milk can containing 7.7 litres of milk. Use it to answer the questions about it.



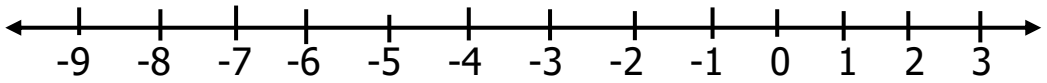
(a) Find the height of the milk in the can. *(03 marks)*

(b) The milk is sold using container B, whose base area is 70 cm^2.
How many containers will be sold? *(03 marks)*

30. (a) Arrange the following in descending order. *(02 marks)*
-4, 1.0, 1.5, 5, -6, -2

(b) Use the number line below to work out -3 + $^{-}$5. *(02 marks)*

Number line:



(c) What is the multiplicative inverse of -3? *(02 mark)*

31. The marks in the table below were scored by pupils during a mathematics contest.

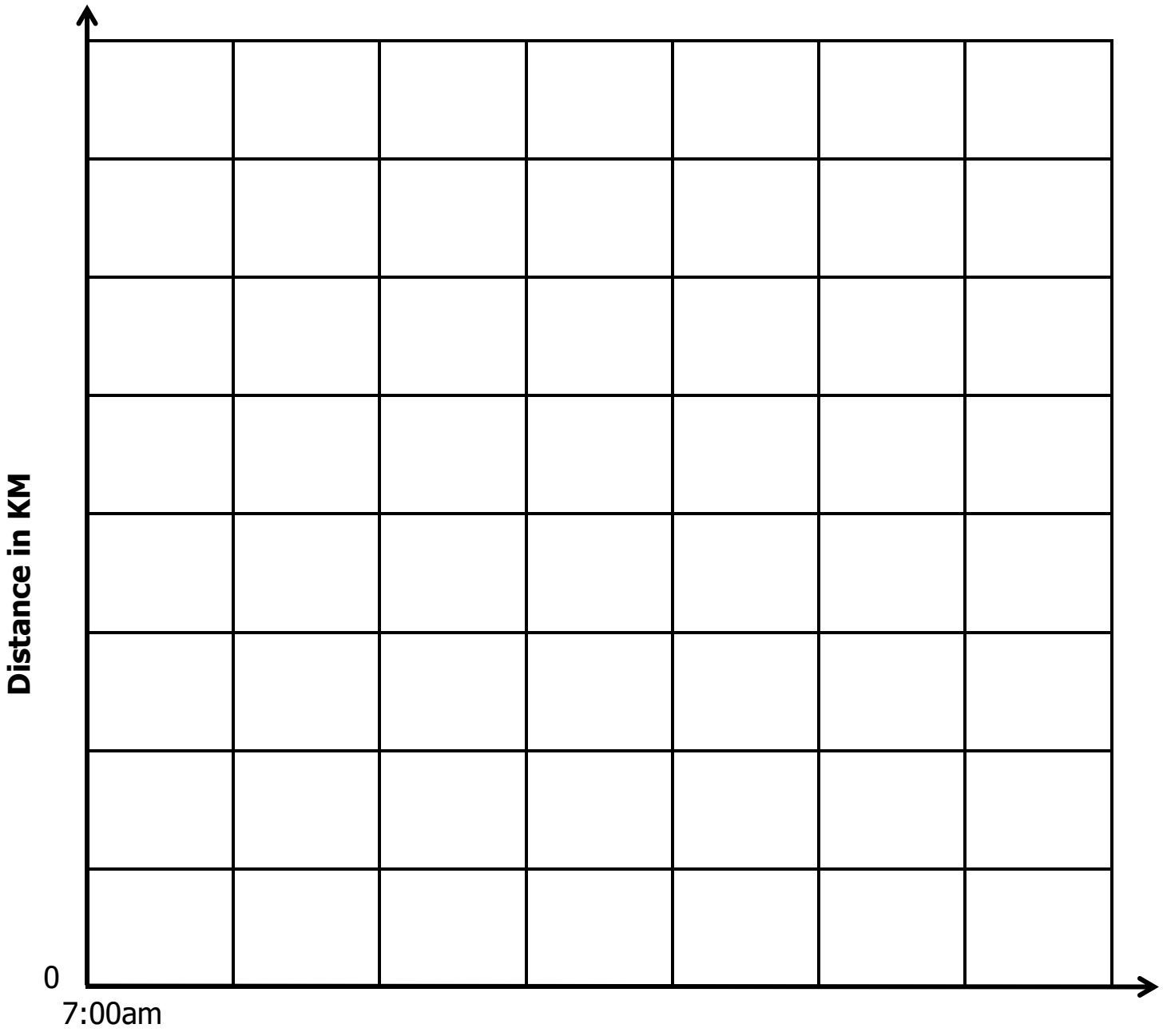
Marks	40	52	y	60	50
No. of Pupils	4	5	2	3	1

(a) How many pupils sat for the contest? *(01 mark)*

(b) Calculate the value of y if the average mark is 54. *(04 marks)*

32. The distance between Kampala and Masaka is **350km** apart. The taxi set off from Kampala at **7: 00a.m** travelling at a constant speed of **50km/h** for two hours. It then stopped for one hour and later proceeded with the journey at a steady speed for **4 hours** to Masaka. Show the movement of the taxi on a distance time graph below. *(05 marks)*

Vertical axis: 1 small square represents 50km.
Horizontal axis: 1 small square represents 1 hour.



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