STEM EXAMINATIONS BOARD

TERM ONE ASSESSMENT SET I, 2024

PRIMARY SEVEN

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.	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 **8 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 the examination room.
6. Unnecessary **changes** in your work and handwriting 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. Work out:
$$\begin{array}{r} 103 \\ \times\ 3 \\ \hline \\ \hline \end{array}$$

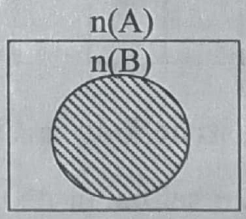
2. Simplify: $p - 3m + 7p - 5m$

3. The product of two numbers is 432. If their LCM is 72, find the GCF of the two numbers.

4. Round off 103.73 to the nearest whole number.

5. Given that  stand for 13 bibles. Draw picto-graph to represent 39 bibles.

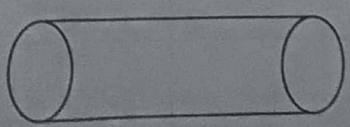
6. Describe the un-shaded region in the Venn diagram below.



7. Convert 7.07 Litres to CM^3.

8. A profit of Shs. 5000 was made on a table sold at Shs. 55000. Calculate its percentage profit.

9. Draw a net of the geometric figure below.



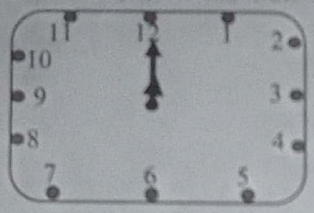
10. Work out: $\frac{4}{5} - \frac{1}{2}$

11. Find the median of the score below.

Number of pupils	1	2	1	3
Marks scored	10	25	30	15

12. Write "Ninety thousand four hundred nine" as a numeral.

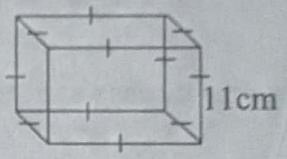
13. Tell the morning time shown on the clock face below.



14. Andrew's car broke down after covering $\frac{2}{3}$ of the journey. If he had covered 60km, how long was the journey?

15. Work out: $106_{nine} + 7_{nine}$

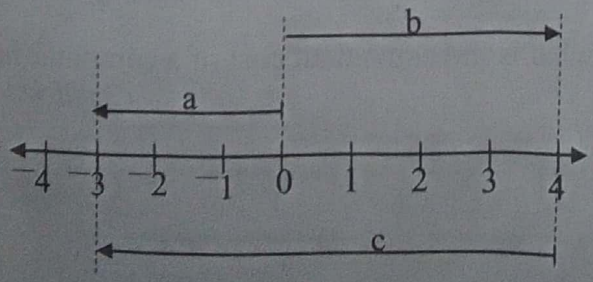
16. Calculate the volume of the cube below.



17. The sum of t, t+2 and t + 4 consecutive even numbers is 36. Solve for the value of t.

18. Using a ruler, a pencil and a pair of compasses only, construct an angle of 90^0.

19. Write the mathematical statement represented on the number line below.



20. Work out the value of ☐:
$2☐ + 7 = 19$

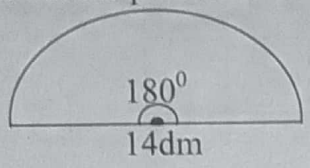
Turn over

SECTION B : 60 MARKS

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

21. (a) Find the area of a rhombus whose diagonals are 10m and 8m respectively. *(2 marks)*

(b) Work out the perimeter of the figure below. *(2 marks)*



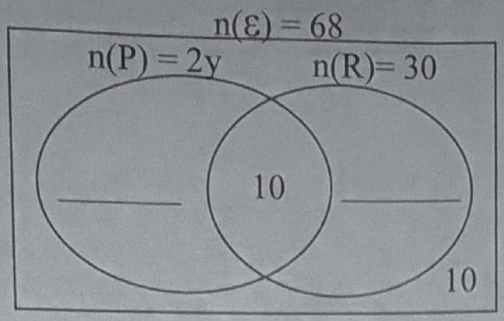
(c) Calculate the circumference of a circle whose radius is 20mm. *(2 marks)*

22. The exchange rates at the forex bureau are as follows;
(i) a Kenya Shilling (K.Sh.) costs Ug Shs. 138.
(ii) a US dollar ($) costs Ug. Shs. 3660.
(a) Convert Ug Shs. 345,000 to Kenya Shillings. *(2 marks)*

(b) If a computer costs 300 US dollars, what is the equivalent cost of a computer in Uganda Shillings? *(2 marks)*

23. A class of 68 pupils was served with posho (P) and rice (R), 2y pupils ate posho, 30 pupils ate rice, 10 pupils ate both posho and rice while other 10 pupils did not eat either of the foods.

(a) Represent the above information on the Venn diagram below. *(2 marks)*



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

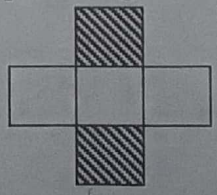
(c) Work out the probability of picking a pupil at random who ate one type of food only. *(2 marks)*

24. Complete the 3 x 3 magic puzzle whose sum is 21 to find the values of a, b, c, d, e and f. *(6 marks)*

a	b	c
9	f	5
d	e	6

25. (a) Simplify: $\frac{0.36 \times 0.6}{0.7 + 0.02}$ *(3 marks)*

(b) Use the figure below to find the percentage of;



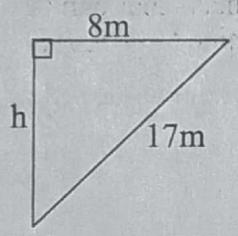
(i) the unshaded part. *(1 mark)*

(ii) the shaded part. *(1 mark)*

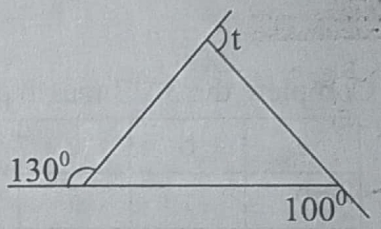
Turn Over

26. A teacher drove from school at 5:30p.m travelling at a speed of 60km/hr and arrived home 100km away from the school in the evening.
At what time did she reach her home? *(4 marks)*

27. (a) Work out the height (h) of the right angled triangle below. *(2 marks)*



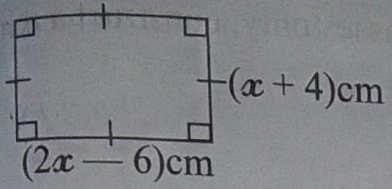
(b) Calculate the size of angle marked t in degrees. *(2 marks)*



28. (a) Decrease Shs. 60,000 by 30%. *(2 marks)*

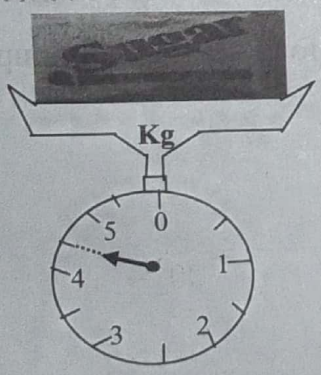
(b) Find the amount of money on Shs. 80,000 borrowed for 2 years at a simple interest rate of 10% per annum. *(4 marks)*

Solve for the value of x from the figure below in cm. *(2 marks)*



Tom is 9 years older than his sister.
Their total age is 39 years, how old is the sister? *(2 marks)*

he figure below shows a weighing scale used to weigh sugar at Andrew's shop.



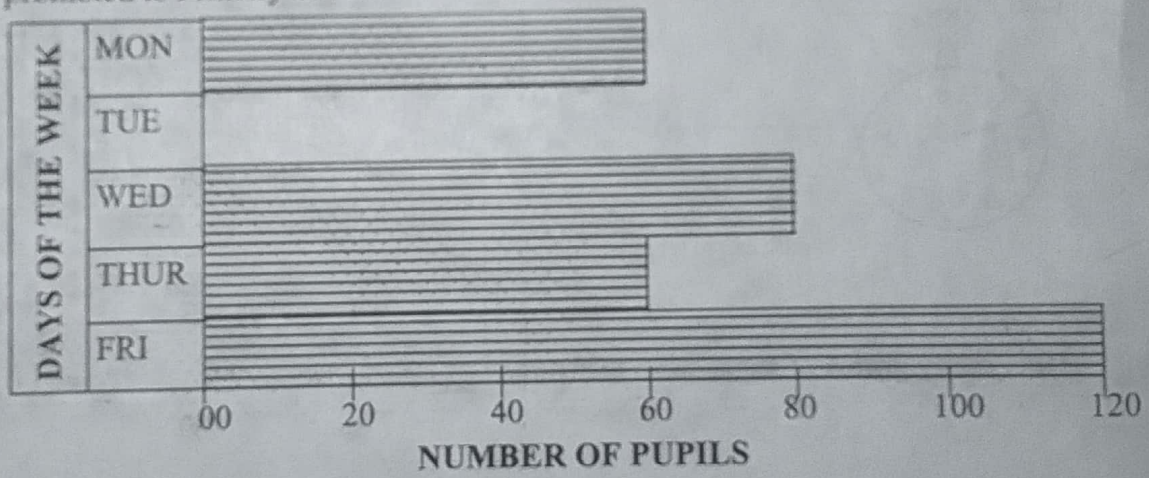
(a) What is the greatest mass that can be recorded on the machine? *(1 mark)*

(b) How many grams of sugar were measured? *(2 marks)*

(c) If a kg of sugar costs Shs. 4000, how much did a customer pay for the sugar? *(2 marks)*

31. With the help of a ruler, a pencil and a pair of compasses only, construct a regular hexagon of radius 3.5cm. *(5 marks)*

32. The bar-graph below shows number of absentees recorded for a class of 120 pupils promoted to Primary Seven.



(a) Which day was most likely to be a public holiday? *(1 mark)*

(b) How many pupils attended on Monday and Wednesday? *(2 marks)*

(c) Calculate the total number of absentees that week. *(2 marks)*

END