EDUCATION SOURCE EXAMINATION 2025

P.7 PRE-PLE INDEPENDENCE SET, 2025
MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.	**Random No.**							**Personal No.**		

Candidate's Name: .....

Candidate's Signature: .....

School Random No. .....

District ID: .....

<u>Do not open this booklet until you are told to do so.</u>

<u>Read the following instructions carefully</u>

1. This paper has two sections: A and B.
2. Section A has 20 short questions (40 marks).
3. Section B has 12 questions (60 marks)
4. Attempt **ALL** questions. Answers to both sections must be written in spaces provided.
5. All answers must be written in blue or black ballpoint pen or ink but not in pencil. Diagrams should be drawn in pencil.
6. Crossing out of answers will lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do not fill anything in the box indicated for examiner's use only.

FOR EXAMINERS USE ONLY		
QN.NO.	**MARK**	**SIGN**
1-10		
11-20		
21-30		
31-32		
TOTAL		

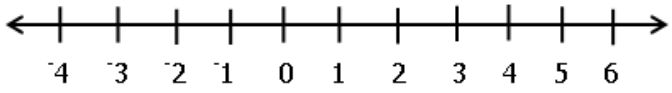
SECTION A:

1. Workout: 9.6 – 7.1

2. Solve for **m** in the equation 2m=8

3. Write **'one hundred eight'** in figures.

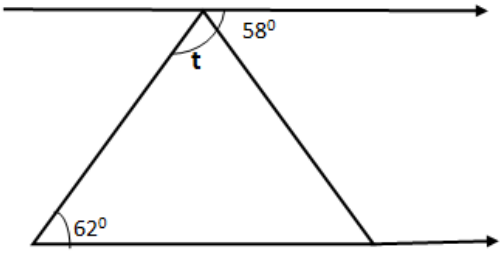
4. Show the operation **-3 + 3** on the number line below.



5. Given that set **R = {1, 2, 3, 4}** and **S= {4, 5, 6, 7}. Find n(RUS)**

6. Express **5100** in standard form.

7. Find the size of angle marked **t** in the diagram below.



8. Kironde travelled for **$4\frac{1}{6}$ hours**. Convert this to minutes.

9. Express **13_{ten}** to binary base.

10. Alice tossed a dice once. Find the probability that a factor of 6 showed up.

11. Work out: $\frac{5}{8} + \frac{5}{6}$

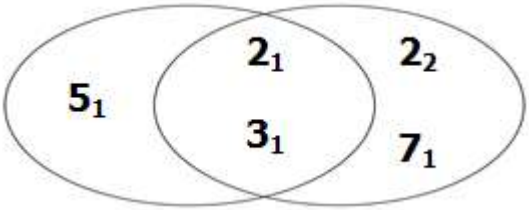
12. Musa bought 50 US dollars(USD) at Uganda Shillings (UGX) 192,500. Find the amount of USD Musa would buy if he had UGX 770,000.

13. Write the number which has been expanded to give;

$(2\times10^3) + (2\times10^1) + (3\times10^0)$

14. The average age of Ddumba's three children is 11 years. The average age of two of the children is 10 years. Find the age of the 3rd child.

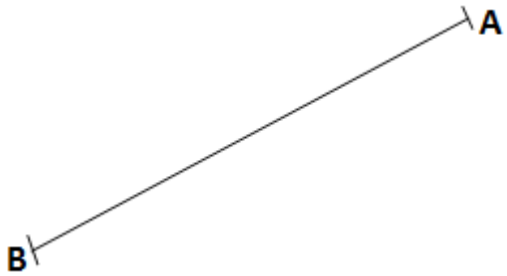
15. Find the two numbers that have been prime factorized on the vein diagram below.



16. A mathematical set costs five times as much as a rubber. Sula bought a Mathematical set and two rubbers and paid **Sh.6,300**. Find the cost of a rubber.

17. Nakirya took 26 days weeding her millet garden. She completed weeding it on Tuesday. What day of the week did she start weeding the garden?

18. Using a ruler, sharp pencil and a pair of compasses only, bisect line **AB** below.



19. Express **0.15kg** as grammes.

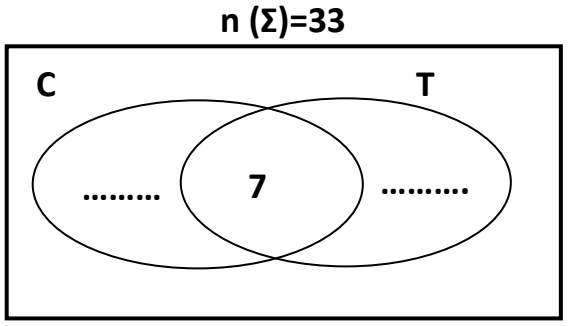
20. The time is **18 55 hours**. What time is it in 12-hour clock system?

SECTION B: 12 QUESTIONS (60 MARKS)

(Marks for each number are indicated in the brackets)

21. A class has **33** pupils. **19** play tennis**(T), 7** play both tennis and chess **(C)** and ***p*** play chess only.

(a) Complete the Venn diagram below. **(2 marks)**



(b) Find the value of ***p.*** **(2 marks)**

(c) Find the total number of pupils who play only one of the mentioned games. **(1 mark)**

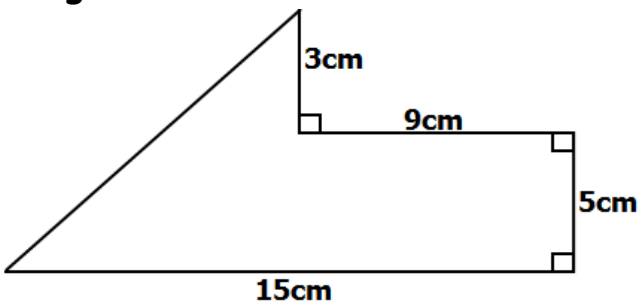
22. (a) With the help of a ruler, sharp pencil and a pair of compasses only, construct a triangle **BCG** where $\angle$**BCG** =60^0, $\overline{\textbf{BC}}$=**8cm** and $\overline{\textbf{GB}}$ =**7.5cm** **(4 marks)**

(b) Measure: $\angle$**CGB** = ……. **(1 mark)**

23. Obbo got a loan of Sh. 200,000 from a micro finance bank. He paid back a sum of Sh. 220,000 after the loan period.
(a) Calculate the interest Obbo paid. **(2 marks)**

(b) If the loan period was 6 months, find the interest rate per year. **(3 marks)**

24. **Study the diagram below and use it to answer questions (a) and (b) that follow.**



(a) Find the area of the figure. **(3 marks)**

(b) Calculate the distance round the figure. **(2 marks)**

25. Duku drove at 96km/hr for 2 hours and 30 minutes. Calculate how long the return journey took him at a steady speed of 80km/hr. **(4 marks)**

26. (a) Solve for **y**: **5 – 2(y - 8) = 13** **(3 marks)**

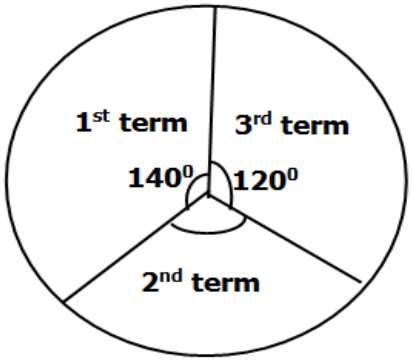
(b) Solve the inequality below. **5 – 2x ≥ ⁻7** **(2 marks)**

27. (a) Work out: $\frac{18 \times 0.45}{2.7}$ **(3 marks)**

(b)Work out: $3\frac{1}{2} - 1\frac{1}{4} \times 2\frac{2}{3}$ **(3 marks)**

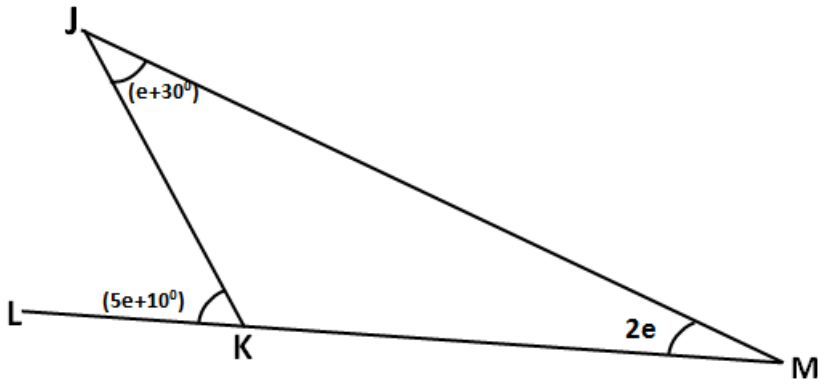
28. The pie chart below shows Naiga's last year's expenditure of Sh. 1,800,000 on her son's school requirements.
Calculate the amount of money Naiga spent on the requirements per term.

(4 marks)



29. A tin of length 25cm, width 16cm, and height 50cm is full of milk. The milk is sold using a cylindrical cup of radius 5cm and height 7cm.
How many liters of milk will remain in the tin after selling 20 full cups?
(Use π as $\frac{22}{7}$) **(5 marks)**

30. Study the figure below and use it to answer questions (a) and (b) that follow.

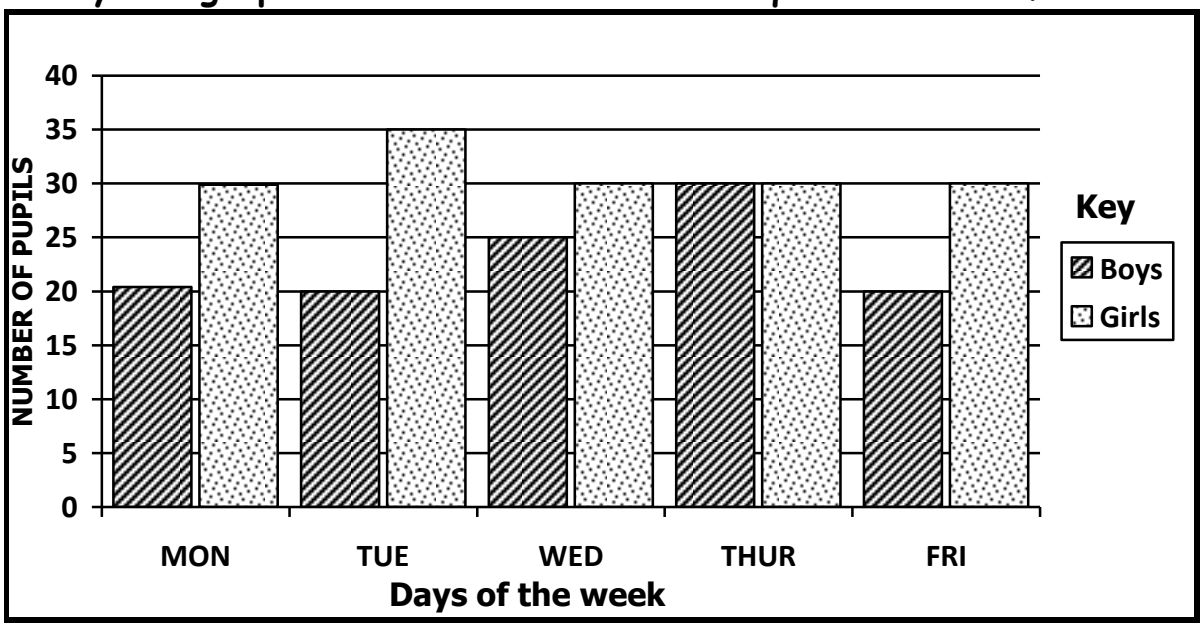


(a) Find the value of **e**. **(3 marks)**

(b) Work out the size of angle **JKM**. **(2 marks)**

31. Naddunga bought a sack of 100kg of groundnuts at **sh.7,500 per kg**. She then packed the groundnuts into **2 kg packets**. She sold all packets and made a profit of **Sh. 250,000**.
At what price did she sell each **2 kg** packet? **(5 marks)**

32. The bar graph below shows the number of girls and boys present each day of the week in class. The class has 40 boys and 35 girls. Study the graph and use it to answer the questions that follow.



(a) On which day were all the 75 pupils present? **(1 mark)**

(b) On which two days was the attendance of boys the same? **(1 mark)**

(c) Calculate the average number of girls present in the week. **(2 marks)**

(d) What percentage of the class was present on Thursday? **(2 marks)**

******END******