SUREKEY EXAMINATIONS BOARD

PRIMARY SEVEN PLE-PREPARATION SET ONE

2025

MATHEMATICS

Time Allowed: 2 hours 30 minutes

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

Candidate's Name: .....

Candidate's Signature: .....

School Name: .....

District Name: .....

Read the following instructions carefully:

1. Do not forget to write your **school** and **district name** 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 **15 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. Workout:
$$\begin{array}{r} 6\ 2. \\ \times\ 4 \\ \hline \\ \hline \end{array}$$

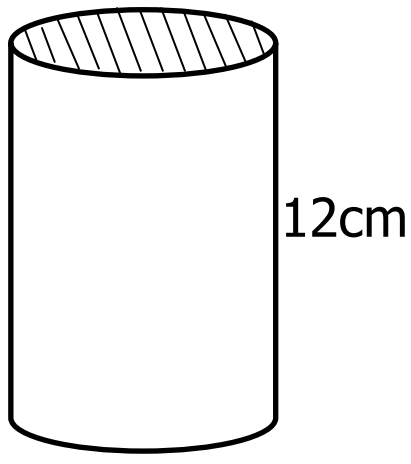
2. Write "One million twenty-four" in numerical figures.

3. Given that Set Q ={m, n}. Write all the subsets that can be formed from Set Q.

4. Simplify the algebraic expression 3p + k + 4k – k – 8p to its possible lowest terms.

5. Solve: $\frac{2}{3} + m = 5$ (finite 7)

6. The area of the shaded part of the cylinder below is 58cm^2. Calculate its volume.



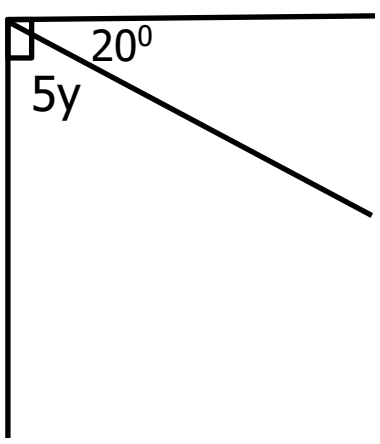
7. Workout: $42 \div (7 \times 3) + 6^0$.

Turn Over

8. Find the largest factor which is common in 28 and 36.

9. Osei read 60 pages of a novel book which was equivalent to $\frac{5}{8}$. Find the the total number of pages contained in the whole novel book.

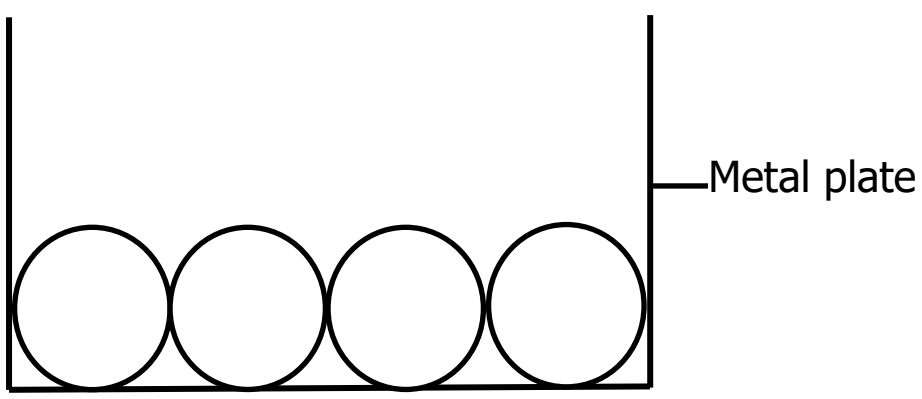
10. In the diagram below, workout the value of y in degrees.



11. A stationary seller made a profit of Sh.6,000 on selling 12 boxes of dustless chalk at Sh.54,000. At how much money did he buy each box of dustless chalk?

12. What number is represented by the standard form 4.53×10^3?

13. The diagram below shows four circular plates of the same size cut along one of a metal plate of length 112 metres.



Find the radius of each circular plate.

Turn Over

14. Draw an isosceles triangle in the space provided below and on it, show all the lines of folding symmetry.

15. Find the sum of 103_{four} and 122_{four}.

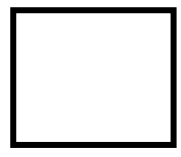
16. At what speed can you drive a vehicle through a distance of 108km in 2 hours and 15 minutes?

17. A school hired 15 builders and they constructed the Main Hall block in 16 days. How many builders would the school have hired if they had to complete the hall in 6 days?

18. Workout: $\frac{6}{7} - \frac{2}{3}$.

19. Using a sharp pencil a ruler and a pair of compasses only, construct an angle of 105^0 in the space below.

20. Mr. Kasirye rears two types of chicken, broilers and layers in the ratio 7:4 respectively. If the total number of chicken he rears is 440, how many are broilers?



Turn Over

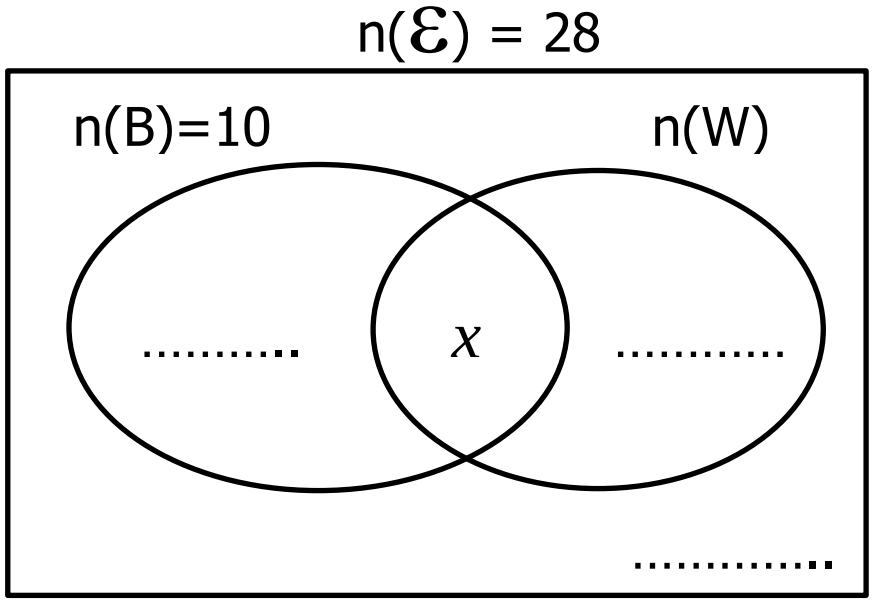
SECTION B: 60 MARKS

Answer **all** questions in this section

Marks for each question are indicated in brackets.

21. Given that n(B) = 10, n(B ∩ W) = x, n(W – B) = x +6, n($\mathcal{E}$) = 28 and n(B ∪ W)' is twice n(B ∩ W).

(a) Use the information above to complete the Venn diagram below. (03 Marks)



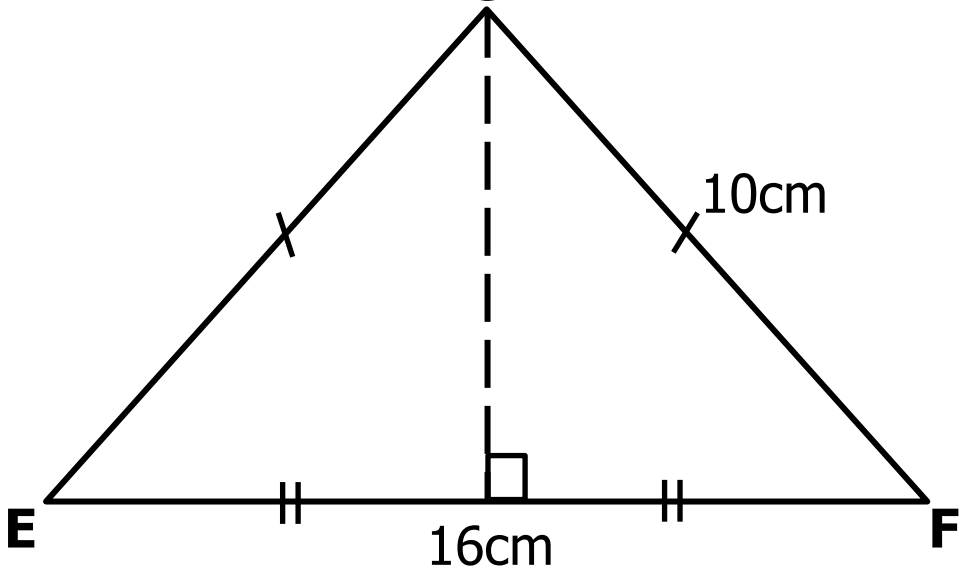
(b) Find the value of x. (02 Marks)

22. (a) Solve: $3^{4t} = 3^{t+6}$. (02 Marks)

(b) Without actual division, show whether 4068 is a multiple of 9.

(02 Marks)

23. Find the area of the triangle **EFG** below. (04 Marks)



24. A taxi left Jinja at 11:45a.m travelling at 80km for every hour to Mukono. The distance between the two towns is 160km. Express the time at which the taxi reached Mukono in the 12-hour clock system. (05 Marks)

25. A Kenyan trader wanted to exchange Ksh.44,000 into Tanzania currency. Use the market rates of exchange below and calculate the amount of Tanzania shillings the trader got. (04 Marks)

1 Kenya Shillings (Ksh) = Ugsh.36.
1 Tanzania Shillings (Tzsh) = Ugsh.24

26. Primary Seven pupils of Kasumba Primary School performed as follows in the Pre-Registration Exams; $\frac{3}{5}$ passed in Division One, $\frac{1}{2}$ of the remainder in Division Two and 8 pupils passed in other grades.

(a) Find the fraction of the pupils who passed in other grades.
(04 Marks)

(b) What is the total number of pupils who did the exam? (02 Marks)

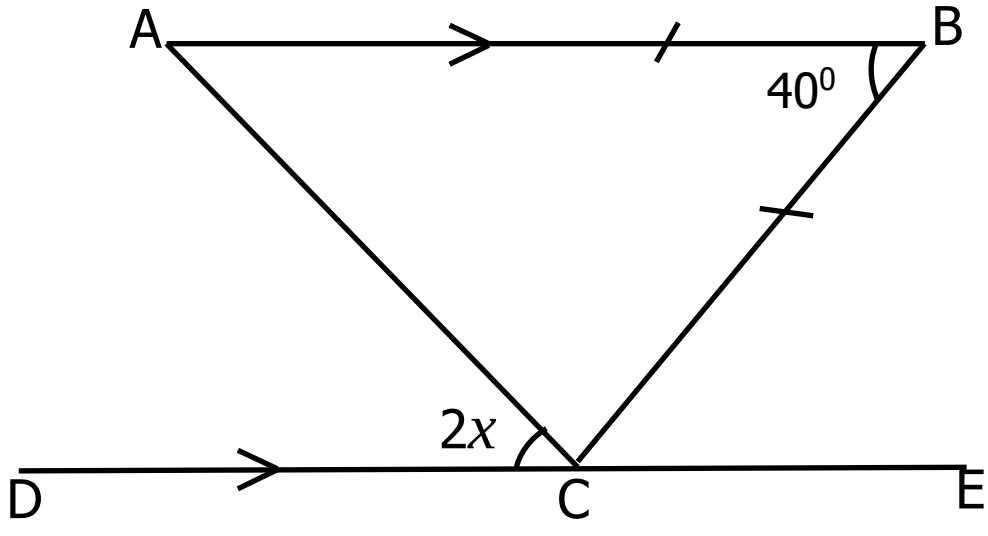
27. (a) Solve the equation: $3k - 5 = 25$. (03 Marks)

(b) If $a = b$, $b = 6$ and $c = -2$. Find the value of $\frac{b + ac}{3}$ (03 Marks)

28. Two patients A and B whose body temperatures were 37.8^0c and 38^0c respectively were admitted at Koboko Health Centre III on a certain day. After two hours, patient A's temperature rose by 1.2^0c while B's temperature dropped by 1.4^0c. Workout the patients' temperature difference after the two hours.

(05 Marks)

29. In the diagram below, line AB is parallel to line DE. ABC is an isosceles triangle and angle ABC =40^0. Study the diagram and use it to answer the questions that follow.



(a) Find the value of x in degrees. (02 Marks)

(b) Workout the size of angle **BAC**. (02 Marks)

30. The marks below were obtained by applicants during a job interview.

60, 40, 50, 60, 40, 50, 50, 60, 60, 40

(a) Complete the frequency distribution table below with the above marks. (04 Marks)

Marks	Frequency	Total marks
40	3	120
50	.....	.....
60	.....	.....

(b) Workout the applicants' average score. (02 Marks)

31. (a) Using a ruler and a pair of compasses only, construct a triangle KFC where KF = 6.5cm, angle FKC =120^0 and length KC = 5cm.

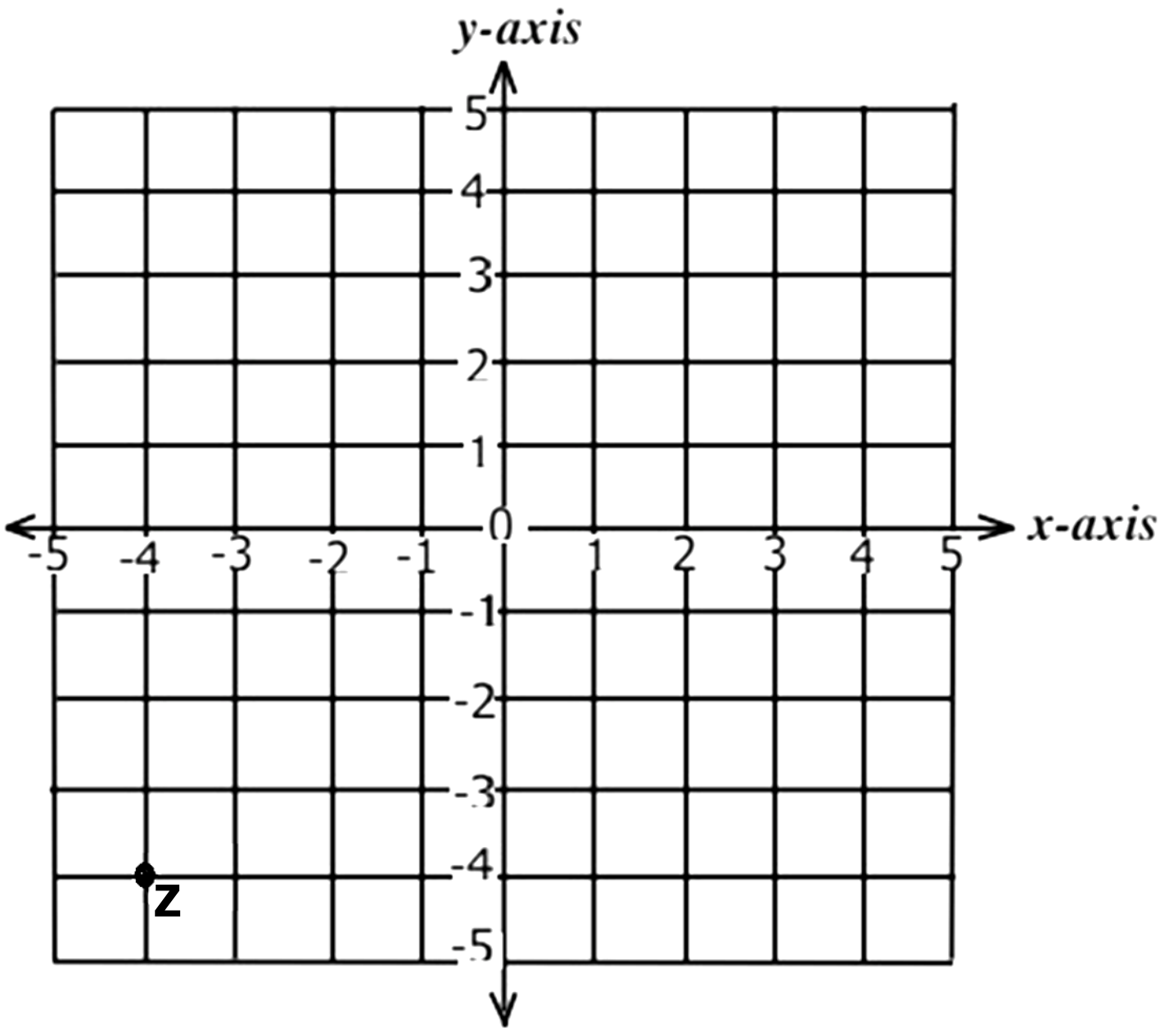
(04 Marks)

(b) Measure the length FC in centimetres. (01 Mark)

Length FC = ……..

32. (a) On the grid below, plot the points; (03 Marks)

W($^{+}3$, $^{+}3$), **X**(0, $^{+}3$) and **Y**($^{+}3$, 0)



(b) Write down the coordinates for Point **Z.** (01 Mark)

(c) Join the points **Z** to **Y**, **X** to **W**, **Z** to **X** and **Y** to **W.** (01 Mark)

(d) Name the geometric shape **WXYZ** formed on the graph above. (01 Mark)

END