

DISTINCTION CHECK UP PLE MOCK 2025

MATHEMATICS

PRIMARY SEVEN BY DR. ISMAEL 0774006787

Duration : 2hours 30 minutes

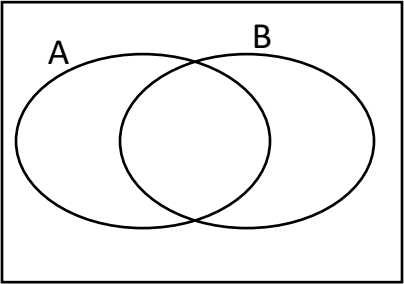
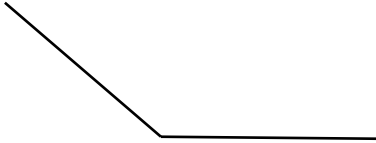
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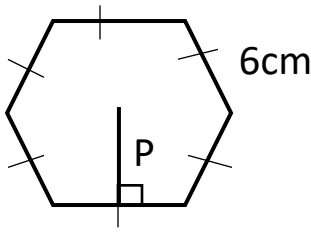
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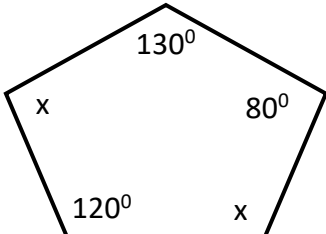
Read the following instructions carefully:

1. The 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. Answer ALL questions. All answers to both Sections A and B must be written in the spaces provided.
5. All answers must be written using a blue or black ball point pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary alteration of work may 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 boxes indicated for Examiner's use only.

FOR EXAMINER'S USE ONLY

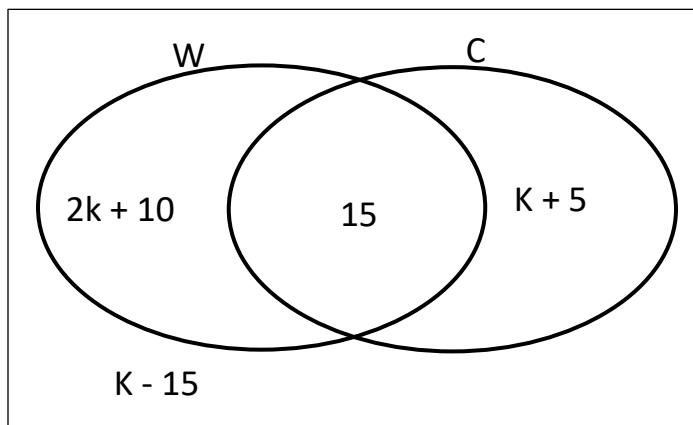
1	How many days are in 5 years?	2	Find the next number in the sequence, -60, -50, -41, -33, -27
3	On the Venn diagrams below, shade neither set A nor set B 	4	A cylindrical tin full of coffee weighs 45kg. When it's $\frac{1}{3}$ full it weighs 17kg. Find the weight of the empty tin.
5	Solve for t. $t^2_{\text{six}} = 174_{\text{eight}}$	6	The distance around a quadrant is 325mm. find its circumference.
7	Simplify $\frac{2}{3}k - \frac{4}{5}k$	8	Bisect the reflex angle below 

9	How many groups of 12 can be got from 6396?	10	Express 0.004 in scientific form
11	The area of the figure below is 108cm^2. Find the size of p. 	12	Set $A = \{a, b, c, d, e\}$ $B = \{a, e, i, o, u, b, c\}$. How many proper subsets are in the complement of $A \cap B$?
13	Solve for m $2^{2m} + 2^2 = 68$	14	A baby slept at 9:15 p.m. and woke up at 4:38 a.m. For how long did the baby sleep?
15	Reduce 60 by $2\frac{1}{3}$ of it	16	Given that $a=2$, $b=3$ and $c=5$. Evaluate $a+b+c(a+b+c)$

17	An airplane left Kampala at 1:40pm and took $63\frac{2}{3}$ hours to reach Mexico. At what time did it reach Mexico?	18	Find the size of angle r 
19	Tom bought two goats at Sh 180,000 and sold each at Sh 75,000. Find his percentage loss	20	Change 664000 square metres to hectares

SECTION B (60 marks)

21. The Venn diagram below shows number of pupils who support Westham (W) and Chelsea (C).



a. if $\frac{3}{5}$ of those who support Westham only is equal to those don't support it, find the value of k (3 marks)

b. find the probability if a cheer leader picked at random supports Chelsea only? (2 marks)

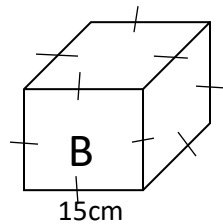
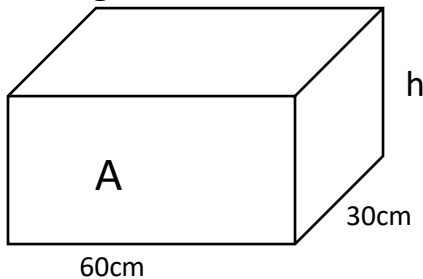
22. A trader bought a phone at a certain amount of money. He increased the price by 50% and failed to sell the phone. He reduced the increased price by 20% and then sold the phone at Sh 480,000. How much profit did the trader make? (4 marks)

23. Solve for y. $\frac{0.6 \times 0.04}{0.3+y} = 0.03$ (4 marks)

24. a. Solve for h. $\frac{3}{2h+7} = \frac{4}{7h-21}$ (2 marks)

b. Moses is twice as old as Sarah and two thirds as old as Opio. If their total age is 72 years, how old is Moses? (3 marks)

25. In the diagrams below, twenty four small cubes of size B were packed to fit in a big box A.



If an empty space of 9000cm^3 was left in box A, find the value of h. (5 marks)

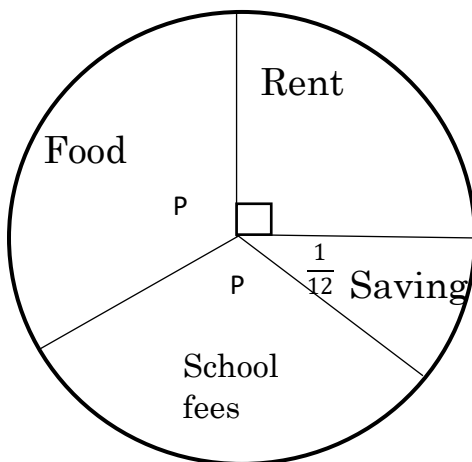
26. a. find the sum of all composite numbers between 110 and 120 (2 marks)

b. find the square root of the 145th odd number . (3 marks)

27. Town A is 180km away from Town B. The taxi left town A at 8:00 a.m. driving at a speed of 40km/h and at the same time the bus left town B driving at a speed of 80km/h. At what time did the taxi meet the bus? (5 marks)

28. The pie chart below shows how Mr. Kazembe spends his monthly salary. use it to answer questions

a. Find the value of p (2 marks)



b. if he spends Sh 50,000 more on food than rent, how much does he save?
(3 marks)

29. a. Write a solution set for $\frac{2k}{3} - 3 \leq k + \frac{1}{3}$ (3marks)

b. if today is Monday 23rd December 2024, what day of the week was it on 14th September the same year? (3 marks)

30. using a a pair of compasses, a ruler and a sharp pencil, construct a quadrilateral ABCD where AB=BC=CD=AD, AC= 6cm and BD= 8cm (5 marks)

31. In a school, $\frac{1}{4}$ of the pupils are boys and the rest are girls. $\frac{1}{5}$ of the girls and $\frac{2}{3}$ of the boys are in boarding section. If there are 8 more boys than girls in boarding section, how many girls are in boarding section? (5 marks)

32. A trunk of diameter 7cm was placed inside a circular pit whose diameter was 14 cm . if the space left was filled with soil of 323140cm^3 , find the height of the pit h (6marks)

