

VICTORIOUS PRIMARY SCHOOLS

PRE-PLE INTERNAL SET 1

2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name:

Candidate's Signature:

District ID:

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Read the following instructions carefully:

1. Do not 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.
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"

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		

1. Work out: $134 - 23$
2. Write 3019 in words.
3. Solve for n : $5 - 2n = 7$
4. Express $\frac{2}{5}$ kgs as grammes.
5. Set K has 15 proper subsets. Find number of elements in set K .
6. Work out $2.0 - 0.5$

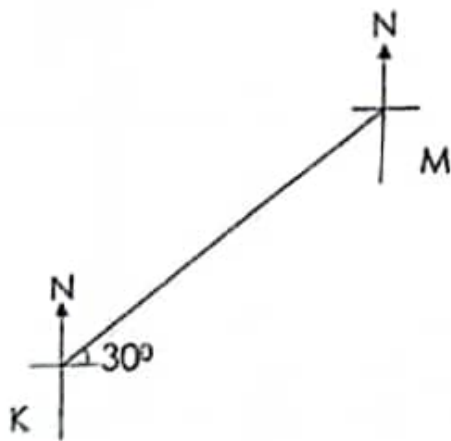
7. A man's salary was increased by $12\frac{1}{2}\%$. Calculate his new salary if the original salary was sh. 320,000.

8. Find the next number in the sequence;

5, 7, 10, 15, 22, ____

9. A motorist covered a distance of 100 metres in 5 seconds. Work out his speed in kilometres per hour.

10. In the diagram below, find the bearing of K from M.



11. The probability of a team winning a game was $\frac{3}{5}$. If the team won 9 games, how many games did the team lose that season?

12. Work out: $8 + 8 \div 8$

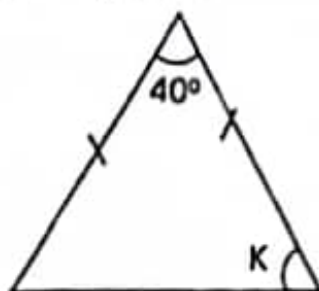
1.8

13. A table costs four times as much as a chair. If the difference in their costs is sh. 24000, find the cost of a chair.

14. Workout: $+3 - -5$

15. A business man sold a radio at sh.200,000 making a loss of 20,500. What was the cost price of the radio?

16. The figure below is an Isosceles triangle. Find the size of angle K.



17. Express 12:45a.m. in 24hour clock time.

18. Moses scored the following marks in a test 9, 8, 7 and 4. Find Moses' mean mark.

19. A head teacher collected sh. 30,000 from each candidate during PLE registration. If he collected sh. 2,550,000 from all the candidates, how many candidates are in his school?

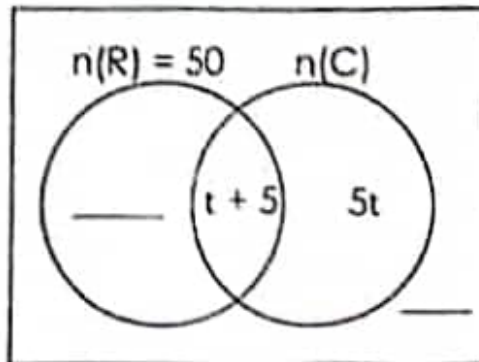
20. A maths home work is given after every 2 weeks, SST after every 4 weeks while English after every 3 weeks. After how many days will the three subjects be given out on the same day?

SECTION B (60 MARKS)

21. In a certain village, 50 farmers grow rice (R), $5t$ farmers grow Cassava (C) only. $(t + 5)$ farmers grow both Rice and Cassava while 10 farmers grow neither of the two crops.

a) Complete the Venn diagram below.

(2 marks)



b) Given that 40 farmers don't grow rice, find the value of t . (2 marks)

22. a) Find the number that has been expanded to give:

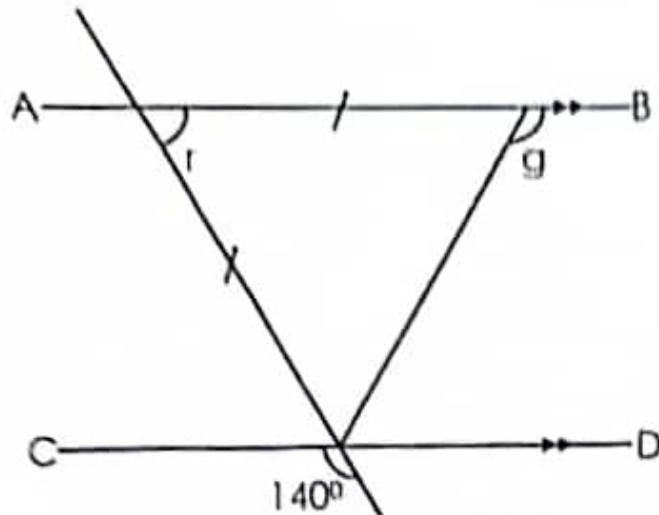
$$(9 \times 10^3) + (6 \times 10^0)$$

(2 marks)

b) Change $102_{\text{base } 10}$ to base five.

(4 marks)

23. Study the figure below carefully and use it to answer the questions that follow.



a) Find the size of angle marked r .

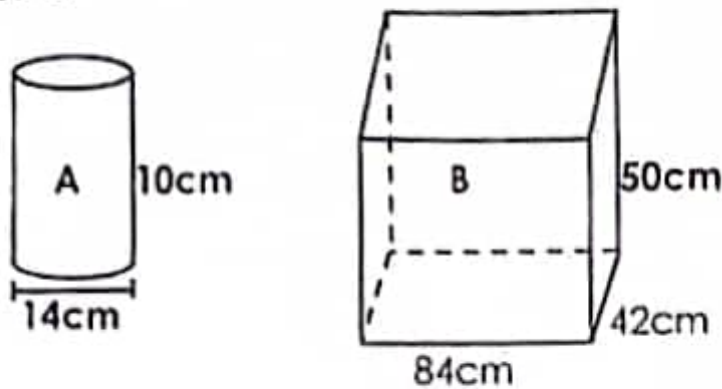
(2 marks)

b) Calculate the value of g in degrees.

(3 marks)

24. A motorist left town A at 11:30 a.m. at a steady speed of 54km/h reaching town B at 2:00p.m. He stayed in town B for 30minutes and continued to town C at a speed of 85km/hr for 2 hours. Calculate the average speed of the motorist for the whole journey. (5 marks)

25. In a blue band factory cylindrical tins of size A are packed in boxes size B.



a) How many cylindrical tins of size A can be packed along the first layer of box B? (2 marks)

b) Find the total number of cylindrical tins of size A that will be packed in box B. (4 marks)

26. A primary school has a population of 1200 pupils, $\frac{3}{5}$ are girls and $\frac{3}{4}$ of the boys are in upper primary classes.

a) Find the number of boys in upper primary classes. (3marks)

b) Express the number of boys in lower primary classes as a ratio of the number of girls. (2 marks)

27. The median of three consecutive counting numbers is $2p$. If the sum of the first and the third number is 12.

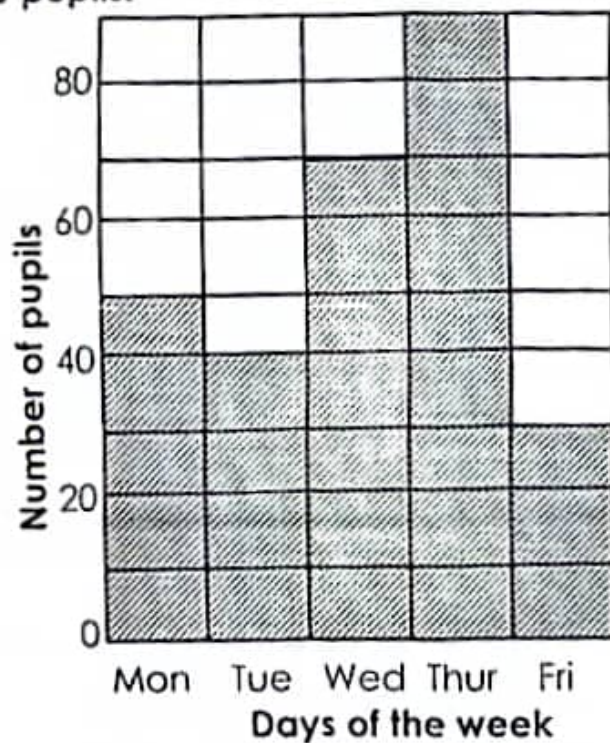
a) Find the value of P .

(3 marks)

b) Work out their average.

(2 marks)

28. The graph below shows one week's daily attendance of a Primary Six of 90 pupils.



a) How many pupils were absent on Friday?

(1 mark)

b) What fraction of the class attended on Wednesday?

(2 marks)

c) Which day recorded the highest number of absentees?

(1 mark)

29. a) Using a ruler, a pencil and a pair of compasses only, construct a triangle KLM where $LM = 6.5\text{cm}$, angle $KLM = 75^\circ$ and $KL = 5\text{cm}$
(4 marks)

b) Measure the length KM. _____ (1 mark)

30. Ochola went to the market and bought the following items;

3kgs of rice at sh. 4500 per kg

750g of salt at sh. 2000 per kg

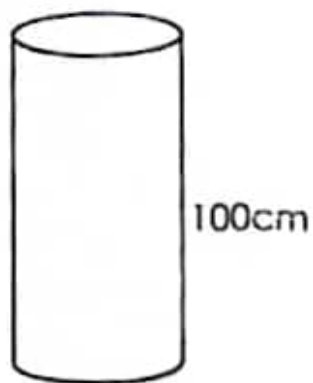
12 tomatoes at sh. 1500 per every 4 tomatoes

a) Calculate the total cost of all the items. (4 marks)

b) If Ochola paid sh. 19000 for the items, how much discount was he given. (2 marks)

31. A pen costs sh. $2y$ less than a book. A book costs sh($4y + 200$). If the total cost of a pen and a book is sh.2800, find the actual cost of the book. (4 marks)

32. A milk seller filled the container below with 15.4 litres of milk.



Calculate the diameter of the container ($\pi = \frac{22}{7}$)

(5marks)

END