SIR APOLLO KAGGWA SCHOOLS SINCE 1996

PLE PREP TEST I TERM 1 2024

PRIMARY SEVEN

MATHEMATICS

Time allowed: 2 hours 30 minutes

Candidate's Name: _____

Candidate's Signature: _____

District Name: _____

School Name: _____

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		
Qn. No	MARK	SIGN
1 – 10		
11 – 20		
21 – 30		
31 – 32		
TOTAL		

Turn over

SECTION A: 40MARKS

*Answer **all** questions in this section*

*Questions **1** to **20** carry two marks each*

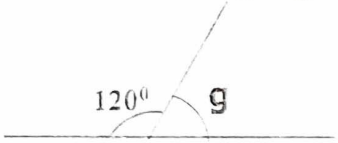
1. Work out: **512 + 43**

2. Write **29** in Roman numerals

3. Given that **A**= {0, 1, 2, 3, 4} and **B**={5, 6, 7, 8, 9}
   Find **n(A∩B)**

4. Simplify: $\frac{7}{9} - \frac{2}{3}$

5. Find the size of angle **g** in the figure below



6. The cost of a cup is **Sh. 3,000** and the cost of a plate is **Sh.2,500**. Musa bought a cup and **2** plates. Calculate the amount of money he paid.

7. Work out: Work out: **3.2 + 6.8**

8. Convert $\mathbf{101}_{\text{two}}$ to base **ten**

9. Opio worked for $2\frac{1}{6}$ hours. Express this time in minutes.

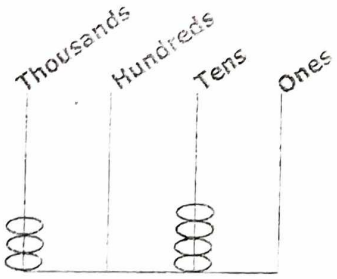
10. Using a ruler, sharp pencil and a pair of compasses only, construct an angle of 60° in the space provided below

11. Mayi bought $\frac{3}{4}$ **kg** of beef. Find the quantity of beef in grams.

12. Calculate the circumference of a curcular field of diameter **21** metres (use $\pi = \frac{22}{7}$).

13. Work out: **1008 ÷ 9**

14. Write the number represented on the abacus below in words.



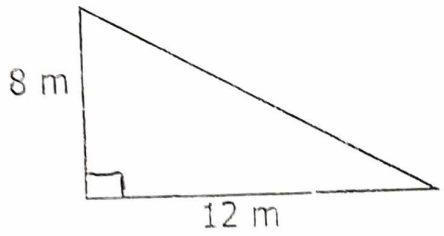
15. Work out: $^{+}8 - {}^{+}5$

16. Simplify: 6k – 2k

17. Tendo had **Sh.70,000**. If he paid **20%** of it for transprot fare. How much was the transport fare?

18. Find the next number in the sequence below.
2, 3, 5, 7, _____

19. Find the area of the triangle below.



20. Okia left town A at **9:30 am** and drove to town B. He arrived at B at 12:30 pm. Calculate the time he took driving.

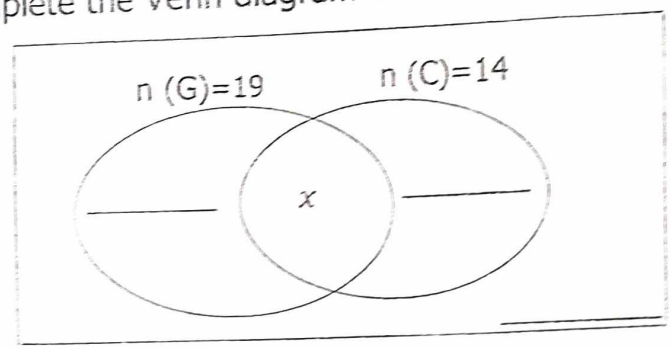
SECTION B: 60 MARKS

*Answer **all** questions in this section*

Marks for each Question are indicated in the brackets

21. In a village with **31** animal farmers, **19** keep goats (G), **14** keep cows (C), **7** do not keep the mentioned animals while x keep both cows and goats.

(a) Complete the Venn diagram below using the information above.



(03 marks)

(b) Find the number of farmers who keep both goats and cows

(03 marks)

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

$(2 \times 10^3) + (2 \times 10^1) + (4 \times 10^0)$.

(02 marks)

(b) Find the value of base e if $34_e = 19$

(02 marks)

23. (a) With the help of a ruler, sharp pencil and a pair of compasses only, construct a triangle **BCD** in which angle **BCD = 90°**, line **CD = 8 cm** and line **BC = 6 cm.**

(04 marks)

(b) Measure line **BD** .....

(01 mark)

24. (a) Work out: $\frac{27 \times 4.8}{2.4}$

(03 marks)

(c) Work out: $1\frac{1}{2} - \frac{5}{6} + \frac{2}{3}$

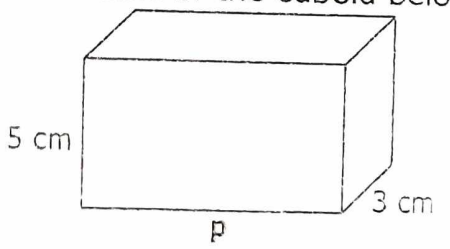
(03 marks)

25. Nalwoga bought the following items from a market;
2 kg of rice at Sh. 3,200 per kg.
$1\frac{1}{2}$ kg of meat at Sh. 14,000 per kg.
500 g of salt at Sh. 2,000 per kg.
A packet of tea leaves for Sh. 1,600.

How much money did she spend altogether?

(05 marks)

26. The volume of the cuboid below is **105 cm³**



(a) Find the value p

(02 marks)

(b) Calculate the total surface area of the cuboid.

(03 marks)

27. A taxi driver left town **X** for town **Y** at **8:00 am** driving at a speed of **80** kilometres per hour. The driver reached town **Y** at **11:30 am.**

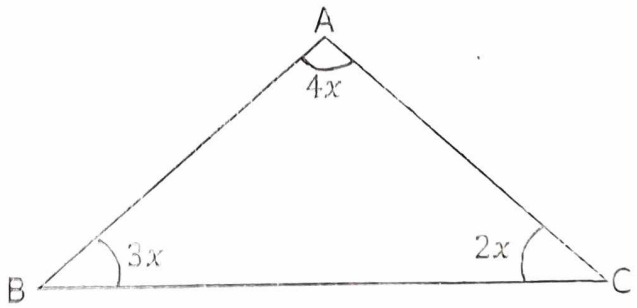
(a) Calculate the time taken by the driver to reach town Y.

(02 marks)

(b) Find the distance between town **X** and town **Y.**

(02 marks)

28. In the triangle below, angle **ABC** = $3x$, angle **BAC** = $4x$ and angle **BCA** = $2x$. Study the figure and use it to answer questions that follow.



(a) Find the value of x in degrees

(03 marks)

(b) Calculate the size of angle marked **BAC**.

(02 marks)

29. Kagoda borrowed **Sh. 360,000** from a bank at a simple interest rate of **30%** per year.

(a) Find Kagoda's total interest after **3** years.

(03 marks)

(b) Calculate the total amount of money Kagoda paid back to the bank after **3** years.

(02 marks)

30. (a) Given that $a = 2$, $b = -4$ and $c = 8$;
Find the value of $ac - b$

(02 marks)

(b) Solve: $3y - 5 = 13$

(03 marks)

31. In a certain school, **P.1** and **P.2** classes have **30** and **40** pupils respectively. The school bought the least number of tennis balls that could be shared by either P.1 or P.2 without leaving a remainder.

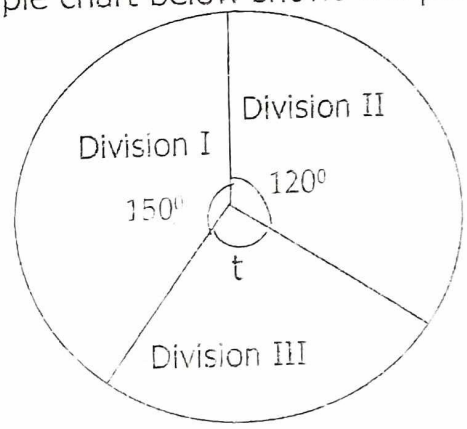
(a) Find the number of tennis balls the school bought.

(02 marks)

(b) If the cost of each tennis ball was **Sh.1,000**, find the cost of all the tennis balls bought.

(02 marks)

32. The pie chart below shows the performance of **72** candidates in PLE.



(a) Find the value of **t** in degrees.

(02 marks)

(b) How many candidates passed in division II?

(02 marks)

(c) How many less candidates passed in division III than in division I?

(02 marks)

THE END