KIRYANDONGO DISTRICT PRIMARY HEADTEACHERS' ASSOCIATION

PRE-PRIMARY LEAVING EXAMINATION, 2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

District ID No:

Read the following instructions carefully:

1. Do not write your **school** or **district name** anywhere 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 **12 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 answer or work done in pencil other than graphs and diagrams will **not** be marked.
5. **No calculators** are allowed in examination room.
6. Unnecessary **changes** in your work and hand writing 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		

Turn over

SECTION A : 40 MARKS.

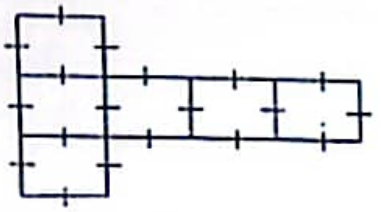
Answer **all** *questions in this section.*
Questions **1** *to* **20** *carry* **two** *marks each.*

1. Work out: $84 \div 7$

2. Write $(9 \times 10^{2}) + (5 \times 10^{0}) + (4 \times 10^{-2})$ in words.

3. Simplify: $2mn - 7pq - mn + 6pq$.

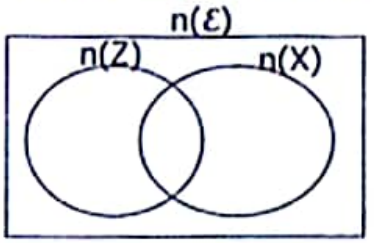
4. The volume of the figure formed from the net below is $64cm^{3}$. Calculate the length of its one side.



5. In a candidate class, the ratio of boys to girls is 3 : 1 respectively. If there are 40 girls, how many candidates are in the class?

6. Joy sold a watch at Shs. 20,000 and made a loss of Shs. 5000. Find her percentage loss.

7. Shade set Z complement in the Venn diagram below.

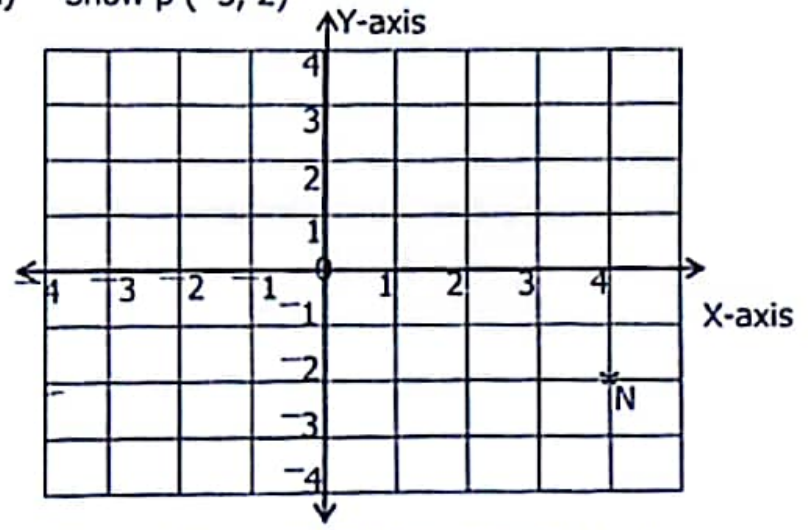


8. How many 250 gramme packets of roasted nuts can be obtained from $2\frac{1}{2}$ kg of nuts?

9. Using a ruler, a pencil and a pair of compasses only, construct the complementary angle of 75^0.

10. On the grid graph below;

(a) Show p ($\bar{3}$, 2)



(b) Name the co-ordinate represented by N.

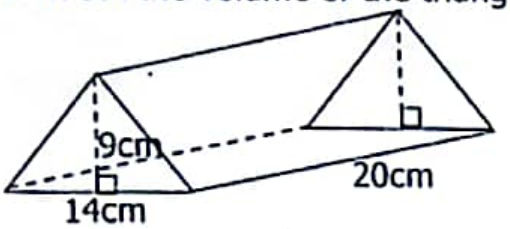
Turn over

11. If today is Tuesday, what day of the week will it be 48 days after tomorrow?

12. Express $0.\dot{4}\dot{5}$ to a rational number in the lowest form.

13. Use tallies to represent the quotient of 108 and 4.

14. Work out the volume of the triangular prism below.



15. Solve for the value of t if $8 \times 4 = 2^{t+2}$.

16. Round off the sum of 1081 and 902 to the nearest hundreds.

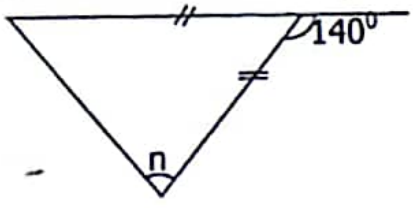
17. At my daughter's 12^{th} birthday, I was 50 years old. After how many years will I be twice as old as my daughter?

18. A trader borrowed money from Finance trust bank at an interest rate of 10% per annum for 2 years. How much did she borrow if she paid an interest of Shs. 80,000?

19. Work out:

Weeks	Days
14	3
− 8	5

20. Calculate the size of angle n in degrees.



Turn Over

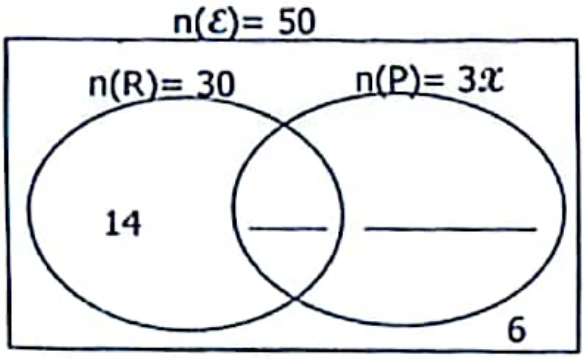
SECTION B : 60 MARKS.

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

Marks for each question are indicated in the brackets.

21. In a class of 50 candidates, $3x$ eat posho (p), 30 eat rice (R) and 14 eat rice only while 6 eat neither of the two types of food.

(a) Use the given information above to complete the Venn diagram below. *(2 marks)*



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

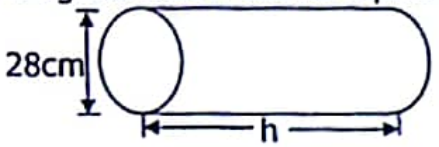
(c) If a candidate is picked at random to lead prayers, what is the probability of picking one who eat only one type of food? *(2 marks)*

22. (a) Solve for base n: $1110_{two} = 24_n$. *(2 marks)*

(b) Use distributive property to simplify;
$(67 \div 7) - (18 \div 7)$ *(2 marks)*

(c) Find the product of 13 and the smallest 3-digit numeral that can be formed from 3, 0 and 4 digits. *(2 marks)*

23. The diagram below shows a plastic cylindrical tin.



(a) If the tin is to be cut to form a rectangular plastic sheet, find the length of the sheet. *(2 marks)*

(b) The area of the rectangular plastic sheet formed is $1760cm^2$. Work out its height (h) in centimeters. *(2 marks)*

24. (a) The average of three consecutive even numerals is 20. List down all the three numerals. *(3 marks)*

(b) Given that; $F_A = \{2_1, 2_2, 3_1, y\}$
$F_{42} = \{2_1, 7_1, y\}$

(i) Work out the Highest Common Factor (HCF) of A and 42. *(2 marks)*

(ii) Find the value of A. *(1 mark)*

25. The table below shows weight of members in a Parish Development Model (PDM) group in a village.

Number of members	||	||||	|	|||
Weight of members in Kg	40	p	90	60

(a) If the average weight was 55kg, solve for the value of p. *(2 marks)*

(b) Calculate the median weight of the members. *(2 marks)*

. 26. The exchange rates at Alex's Forex bureau are as follows;

(i) 1 US dollar ($) costs Ug Shs. 3750

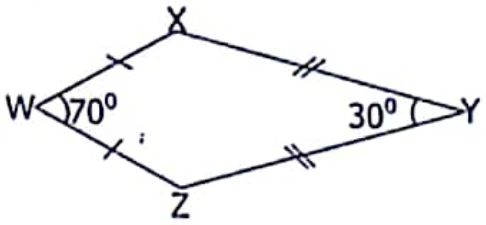
(ii) 1 Pound Sterling (£) costs Ug Shs. 4650.

(iii) 1 Kenya Shilling (K Sh) costs Ug Shs. 28.

(a) A phone costs 180 Pounds. Find the cost of the phone in Uganda Shillings. *(2 marks)*

(b) A tourist came with 70 US dollars. How much Kenya Shillings can he get from the forex bureau? *(3 marks)*

27. The figure below is a kite WXYZ.



(a) Calculate the size of angle WXY in degrees. *(2 marks)*

(b) The interior angle of a regular polygon is 150^0. How many sides has the polygon? *(2 marks)*

28. (a) Simplify: $\frac{7.5}{0.5 \times 0.06}$ *(2 marks)*

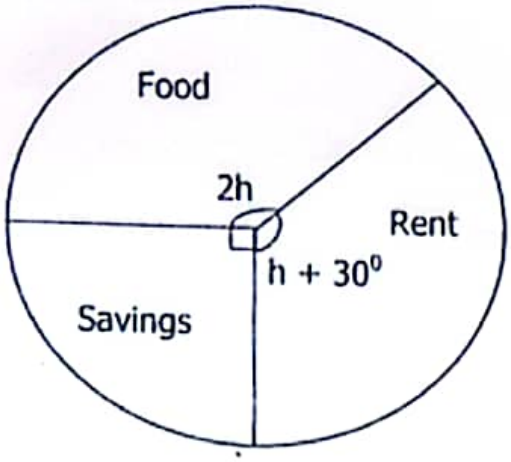
(b) In a school of 1800 pupils, there are 20% more girls than boys.

(i) Find the percentage of boys in the school. *(2 marks)*

(ii) If all girls were given 3 pens each, how many pens were distributed altogether? *(2 marks)*

Turn Over

29. The pie-chart below shows a parent's monthly expenditure. Use it to answer the questions that follow.



(a) Work out the value of h in degrees. *(2 marks)*

(b) If she saved Shs. 180,000, calculate her monthly income. *(2 marks)*

30. The table below shows the departure and arrival time of the teacher from his home to school via town.

STATION	ARRIVAL TIME	DEPARTURE TIME
Home	.....	11 : 40a.m
Town	12 : 40noon	1 : 30p.m
School	2 : 10p.m	.....

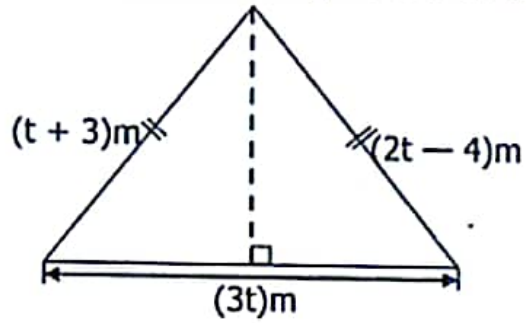
(a) For how long did the teacher rest in the town? *(1 mark)*

(b) Express his arrival time at school to a 24-hour clock system. *(1 mark)*

(c) If a teacher travelled at an average speed of 80km/hr from home to school, how far is the school from home? *(2 marks)*

31. (a) Write the solution set for;
$7 - 2y \geq 3$ *(2 marks)*

(b) Use the isosceles triangle below to answer the questions that follow.



(i) Solve for the value of t in metres. *(2 marks)*

(ii) Calculate the perimeter of the triangle above. *(2 marks)*

Turn over

32. Our town is 60km away from my village on a bearing of 135^0 while my school is 70km away from our town on a bearing of 270^0.

(a) Draw a sketch diagram showing the three places. *(1 mark)*

(b) With the help of a ruler, a pencil, a pair of compasses and a scale of 1cm to represent 10km, construct an accurate diagram showing the three places. *(4 marks)*

END