LUWEERO DISTRICT ACADEMIC BOARD

PRIMARY SEVEN TRIAL TEST 2024

MATHEMATICS

Time Allowed: 2 Hours 30Minutes

EMIS NO.						PERSONAL NO.		

Pupil's Name.....

School Name.....

Pupil's Signature.....

Read the following instructions carefully.

1. The paper has two sections A and B
2. Section A has 20 short questions. (40marks)
3. Section B has 12 questions. (60marks)
4. All answers to questions in both section A and B must be written in the spaces provided below.
5. All answers must be written in blue or black ink. Any work done in pencil other than on graphs and diagrams will not be marked.
6. Unnecessary alteration of work will lead to loss of marks
7. Any handwriting that cannot easily be read may lead to loss of marks.
8. No calculators are allowed in the examination room
9. Do not fill anything in the box labeled "FOR EXAMINERS' USE ONLY".

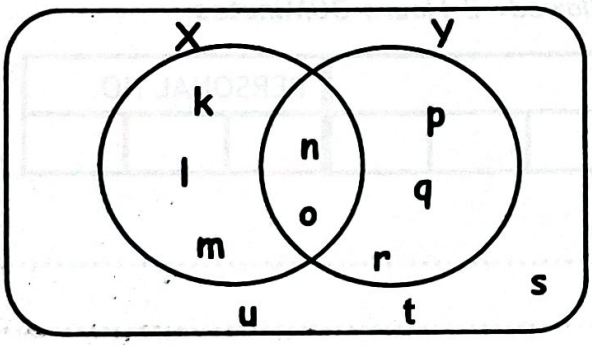
FOR EXAMINERS' USE ONLY		
NO.	MARKS	INITIAL
1 - 5		
06 - 10		
11 - 15		
16- 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

TURN OVER

SECTION A

1. Add: 36 + 12

2. Use the venn diagram below to answer the question that follows.



Find $n(X^{I})$

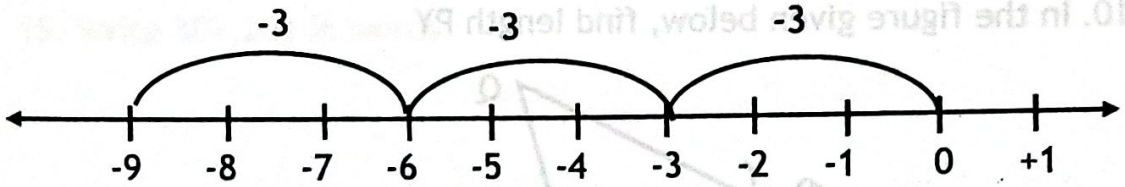
3. Simplify: $\frac{3}{4} \div \frac{1}{2}$

4. Find the next two numbers in the sequence.

   33, 37, 43, 51, 60, 70, _____, _____

5. At Trust junior school, there are 8 more boys than girls in a certain class. Draw tallies to represent the number of children in the whole class, given that the class has 15 girls.

6. Write down the mathematical statement to satisfy the numberline below.

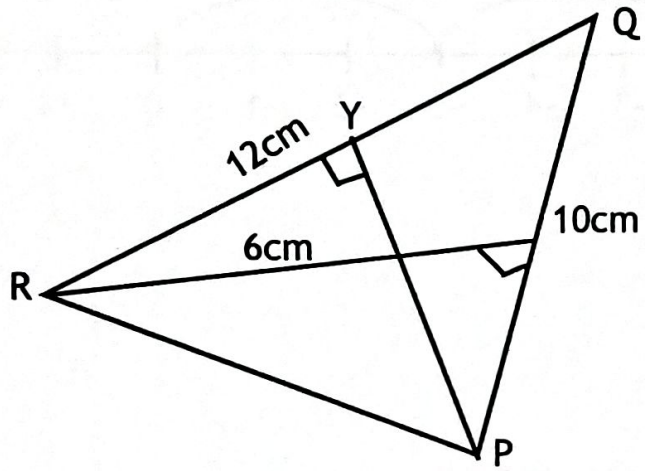


7. Draw an angle of 85^0 in the space below.

8. Find the number of expressed in standard form to get 3.4×10^4

9. A man spent 6 hours walking to reach his destination. If he arrived at 3:30 pm, express his departure time in 24-hour clock system.

10. In the figure given below, find length PY



11. Annet went for shopping and was offered a discount of 12% worth sh.6720. How much money did she pay after discount?

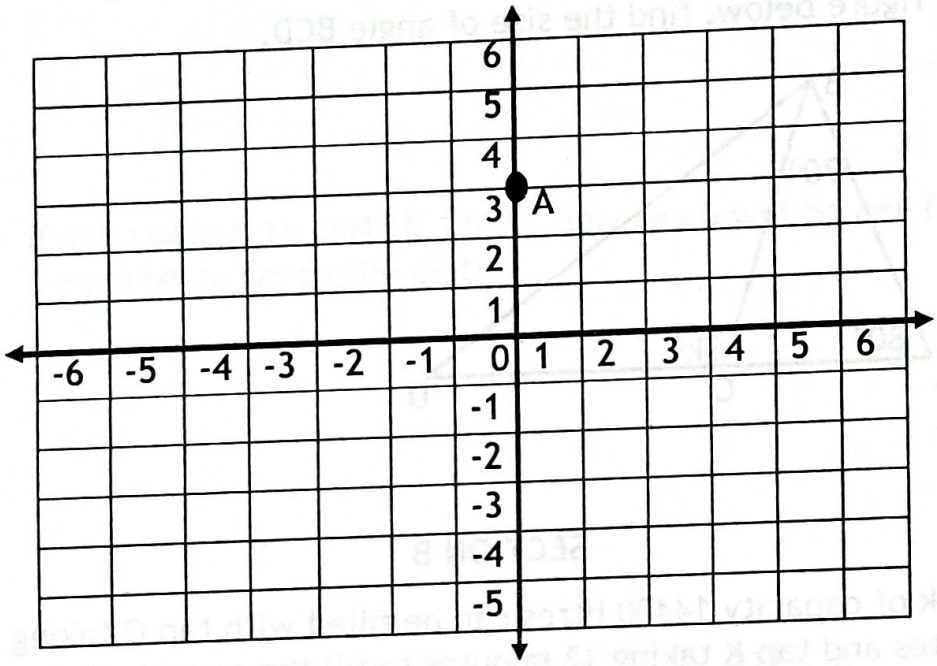
12. Work out: $122_{four} - 33_{four}$

13. Show that 1645 is exactly divisible by 7 without actual division.

14. P is the number of books when arranged in groups of 15, 10 books remain when arranged in groups of 12, 7 books remain. Find the value of P.

15. Write 302,202 in words.

16. Study the grid below and use it to answer the questions that follow.



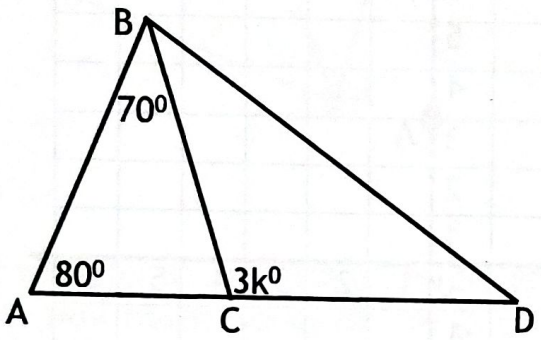
State the coordinated for point A.

17. Solve for y. $8 = 5y - 7$

18. A man drove his ca for a distance of 648km in 4 hours. Express his speed in metres per second.

19. At a certain party, the ratio of the number of bottles of soda to beer was 5:3. If there were 24 beer bottles, how many more sodas were there than beer?

20. In the figure below, find the size of angle BCD.



SECTION B

21. A tank of capacity 14400 litres can be filled with tap Q taking 9 minutes and tap K taking 12 minutes to fill the same tank as tap L takes 6 minutes to empty the tank.

(a). What capacity of water can tap Q and K add to the tank in 2 minutes when opened at the same time? (3marks)

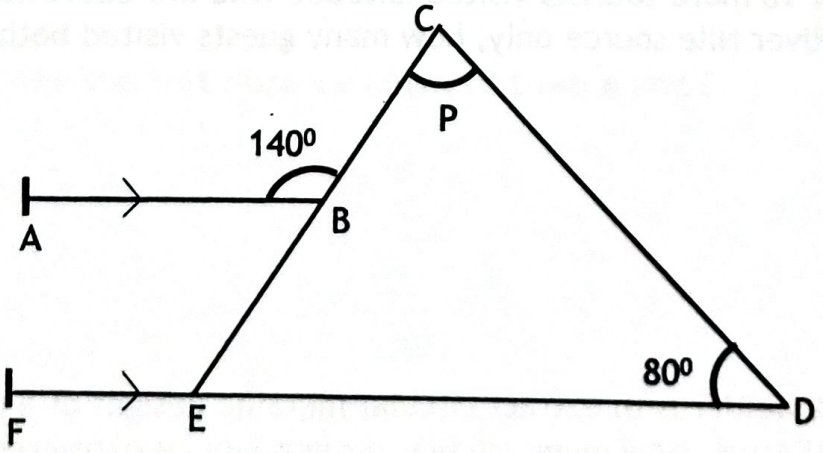
(b). How long can it take to fill the whole tank if all taps are left open? (2marks)

22. Mr. Kiwanika is planning to fence his rectangular plot measuring 4(y+15)m by (2y+45)m and by (3y + 90)m using poles to be fixed at an interval of 6m .

(a). How many poles will be required to fence the plot? (3marks)

(b). If each pole is to cost sh.12000, how much will he pay for the poles required to fence the plot? (2marks)

23. In the diagram below AB is parallel to ED and angle ABC =140^0, angle EDC=80^0. Use it to answer the questions that follow.

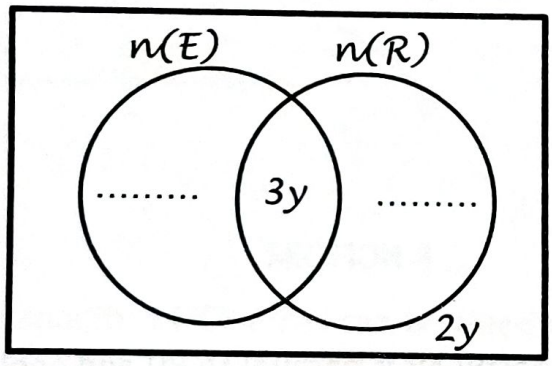


(a) Find the value of angle P (3marks)

(b) Find the supplement of $(y+40)^0$ (2marks)

24. In the month of March, Uganda tourist records were as given, $3y+5$ visited only Entebbe wildlife education centre, $2y-3$ visited River Nile source in Jinja only (R). $3y$ visited both centres and $2y$ visited neither of the two places.

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



(b) If 18 more tourists visited Entebbe wild life Education centre only than River Nile source only, how many guests visited both places? (3marks)

25. A welder is to extract circular metallic designs of a door of area $154cm^2$. How many circular designs will be extracted from a square metal of side 42cm? (4marks)

26. Ali left town A and drove East wards a distance of 140km to town B. He then changed direction and travelled on a bearing of 140^0 to town C at a speed of 40km/hr for 3hours.

(a) Draw a sketch diagram to show the places of the towns. (1mark)

(b) Using a scale of 1cm to represent 20km, draw an accurate diagram of Ali's journey. (3marks)

(c) Find the shortest distance between town A and C (1mark)

27. (a) Solve for y: $4^{2y} \times 4 = 256$ (3marks)

(b) Simplify: $P^3 \times P^4 \div P^5$ (2marks)

28. The sum of the age of three children is 34. The middle child is three times the youngest. The oldest child is four and a half times the youngest. Find the age range of the three children. (5marks)

29. Round off 6787 to the nearest thousands. (2marks)

(b) Express 449 in Roman numerals. (2marks)

(c) Find the number expanded to get $(2\times10^3) + (3\times10^2) + (2\times10^1) + (1\times10^0)$

(2marks)

30. (a) Wamala arrived at the train station 25 minutes before the normal time of departure for the train to Gulu. If the train was 45 minutes late, how long did he wait for the train? (2marks)

(b) Solve and find the solution set for;

$\frac{2x}{3} + 2 \leq 4$ (3marks)

31. Shafic went to the market with sh.70,000 and bought the following items and was later offered a discount of sh.1300 on his total expenditure.

1 ½ kg of meat at sh.14,000 per kg.

Half a sack of charcoal at sh. 45,000 a sack.

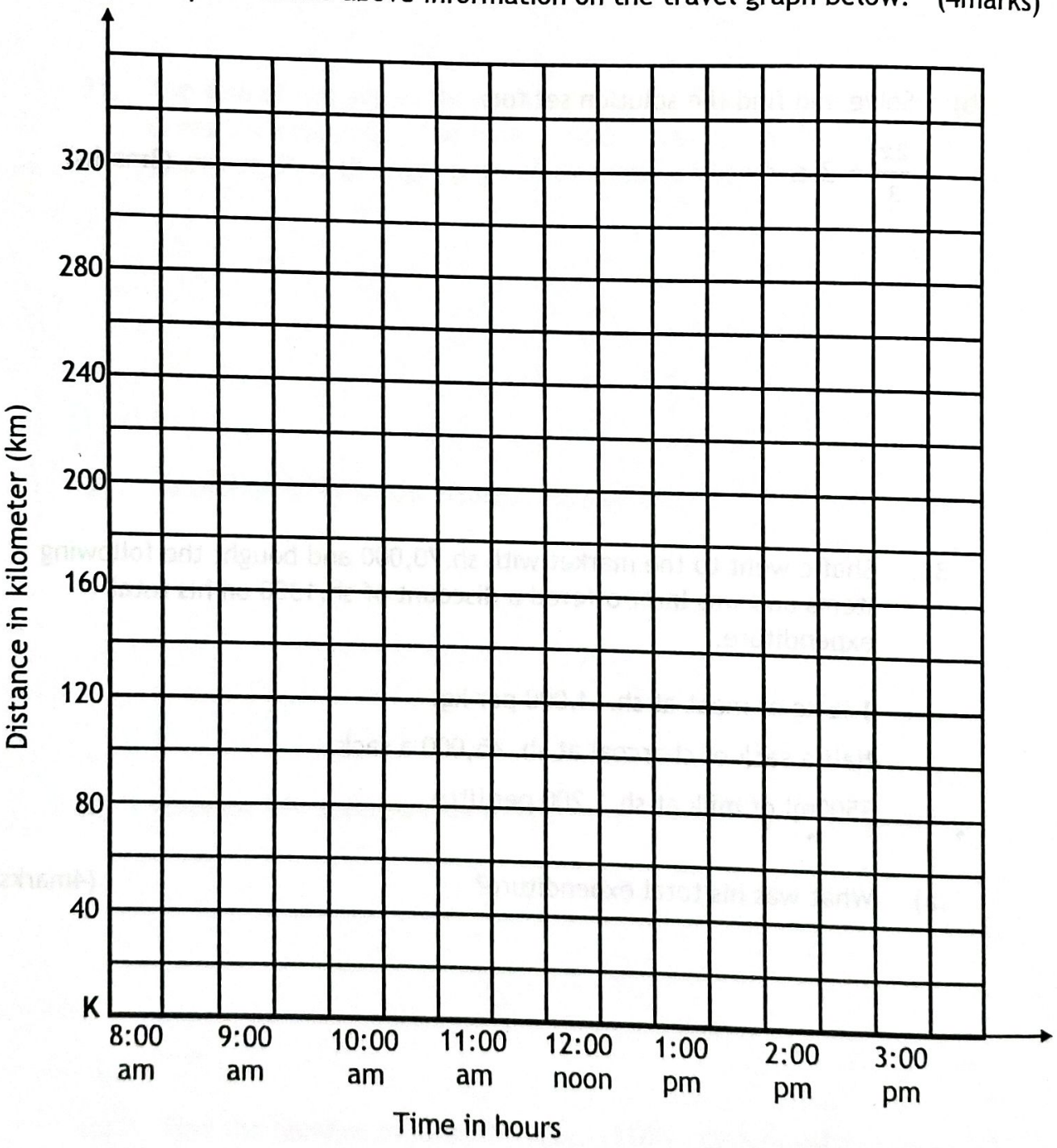
3500ml of milk at sh.1,200 per litre.

(a) What was his total expenditure? (4marks)

(b) How much did he return home with? (1mark)

32. Moses left Town K at 8:00am driving at a steady speed of 50km/hr for 2hours to town L. he rested for half an hour at town L. He then left town L and drove at a steady speed of 40km/hr for 2hours to town N and rested for 30minutes at town N. He then drove back to town K at a steady speed of 90km/hr for 2hours.

(a) Represent the above information on the travel graph below. (4marks)



(b) At what time did he reach town K on his return? (1mark)