GULU CITY EXAMINATIONS COMMITTEE

P.L.E MOCK EXAMINATION 2024

MATHEMATICS

TIME ALLOWED: 2HOURS 30 MINS

INDEX NO: | | | | | | | | | |

CANDIDATE'S NAME: .....

CANDIDATE'S SIGNATURE:.....

SCHOOL: .....

DISTRICT: .....

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

Read the following instructions carefully:

INSTRUCTIONS

1. This paper has **two** sections: **A** and **B.**
2. Section **A,** has 20 questions (40 marks).
3. Section **B** has 12 questions (60 marks).
4. All answers must be written using blue or black pen
5. Unnecessary crossings or changes may lead to loss of marks
6. Any handwriting that can not be easily read may lead to loss of marks.
7. Do not fill anything in the boxes indicated for examiners use only.
8. The use of mathematical tables and electronic calculators is not allowed.

FOR EXAMINERS' USE ONLY		
PAGES	MARK	SIGN
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)

1. Work out: 56 ÷ 7

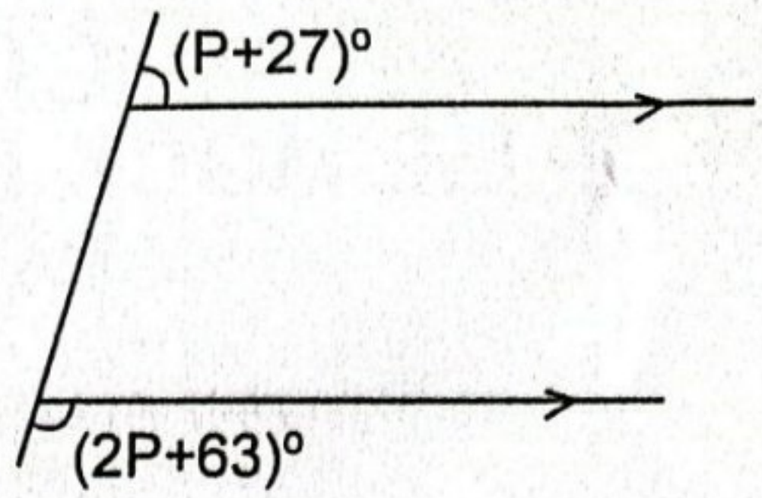
2. Given that set M = { All prime numbers between 6 and 20}. List all the elements of set M.

3. Simplify: 3m + 4 - 7m + 8

4. Convert 47ten to quinary base

5. Show that 1351 is completely divisible by 7 without dividing.

6. Find the value of P in the diagram below.



7. Subtract $2\frac{1}{4}$ from $3\frac{2}{3}$

8. If today is Monday, what day of the week was it 46 days ago?

9. Change 6000m^2 to km^2

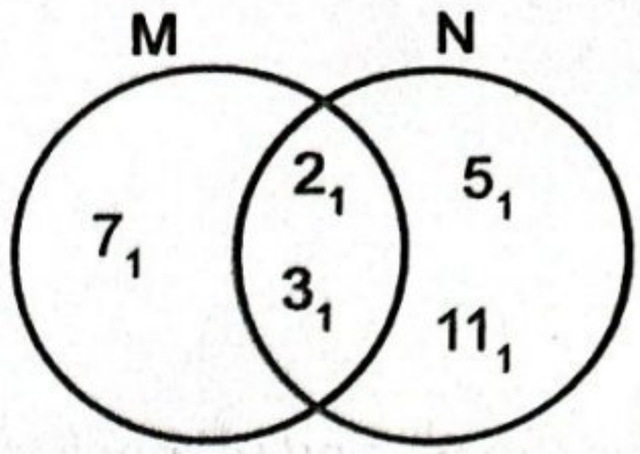
10. The average of 4, 2-n, 7, 2n + 8 is 6. Find the value of n

11. A trader bought two crates of soda at Sh. 37,000. If he sold each bottle at Sh. 1000, calculate his profit.

12. Convert 15m/sec to kilometres per hour.

13. The ministry of Education and Sports supplied 5396 text books equally to 38 schools. How many text books did each school get?

14. Find the L.C.M of set M and set N in the diagram below.



15. Solve $\frac{3r}{7} + 12 = r - 24$

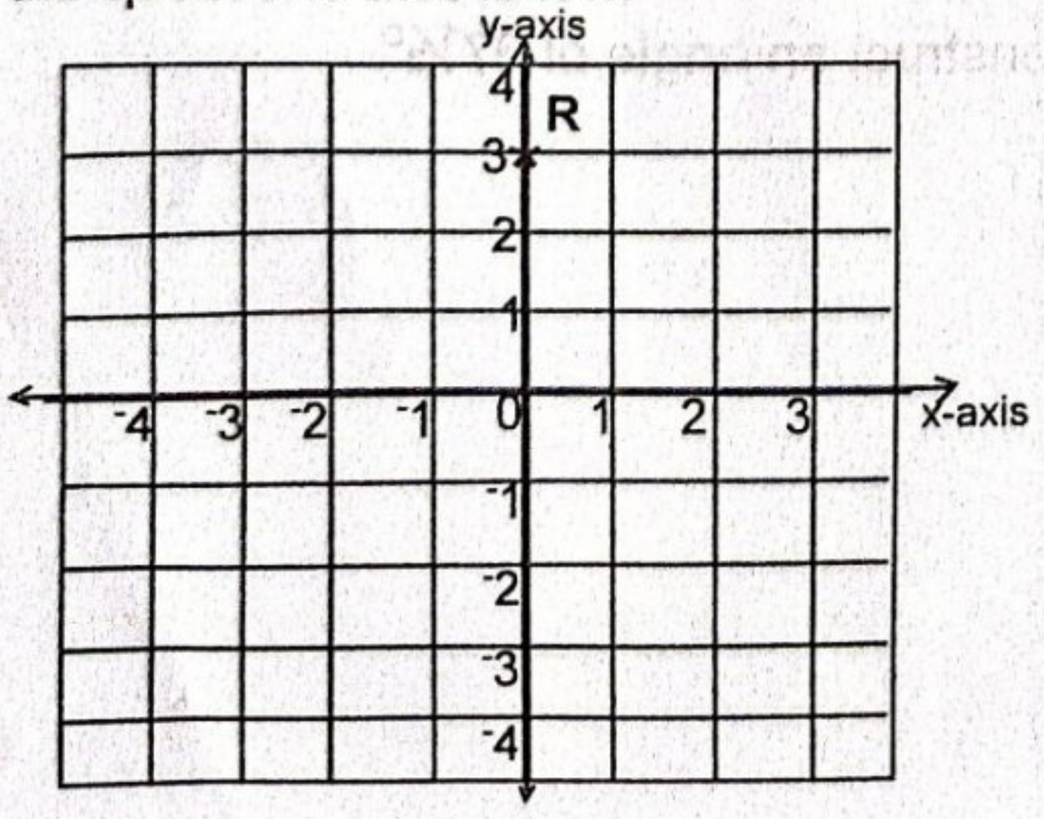
16. In the space provided below, construct an angle of 67½°

17. Increase 1,800kg by $66^{2}/_{3}$%.

18. Matovu is the 6th and 9th pupil from either side in a line. How many pupils are there in the line altogether?

19. Musa bought 16 books but Mary bought 6 more books than Musa. If a book costs Sh.9000. How much money did Mary spend?

20. Study the graph and use it to answer the questions that follow.

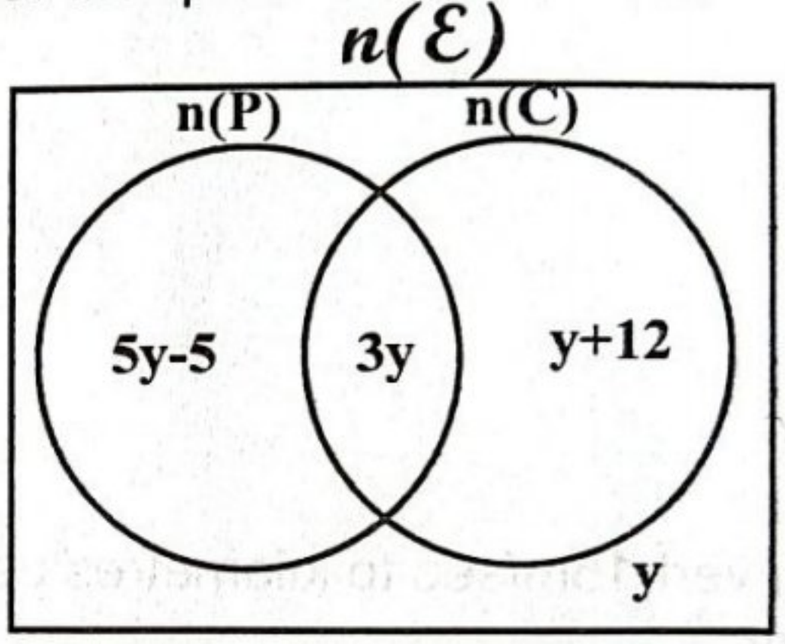


a) Write the coordinate of point R.

b) Locate the point M($^{-}3$, $^{-}2$) on the grid.

SECTION: B (60 MARKS)

21. The Venn diagram below shows the farmers who grow cassava (C) and potatoes (P) in Atiyabar farm. Use it to answer the questions that follow.



a) If those who grow only one type of crop is 19, find the value of y. (2mks)

b) How many farmers are there in Atiyabar farm altogether? (2mks)

c) If a farmer is picked at random, what is the probability that the farmer grows cassava only?

(1mk)

22. Divide 400_{six} by 110_{three} and give your answer in decimal base.

(5mks)

23. A book costs Sh. (P+2000), a ruler costs a half of the price of a book and a bag costs twice as much as a book. If the total cost of all the three itpems is Sh.35,000.

a) Find othe cost of a book.

(4mks)

b) How much does a ruler cost?

(1mk)

24. Workout: $\frac{4}{5} - \frac{2}{3} + \frac{1}{4}$

(2mks)

b) Find the reciprocal of $3\frac{3}{5}$.

(2mks)

25.a) Find the square of 3.6.

(2mks)

b) The area of a square field is $3.24m^2$, calculate the length of one side.

(3mks)

b) Using a scale of 1cm to represent 10km, draw an accurate diagram to show the three places.

(4mks)

26. Larem bus left Gulu city and travelled to Tangi bridge a distance of 50km on a bearing of 130^o and continued to Kafu 80km away on a bearing of 040^o.

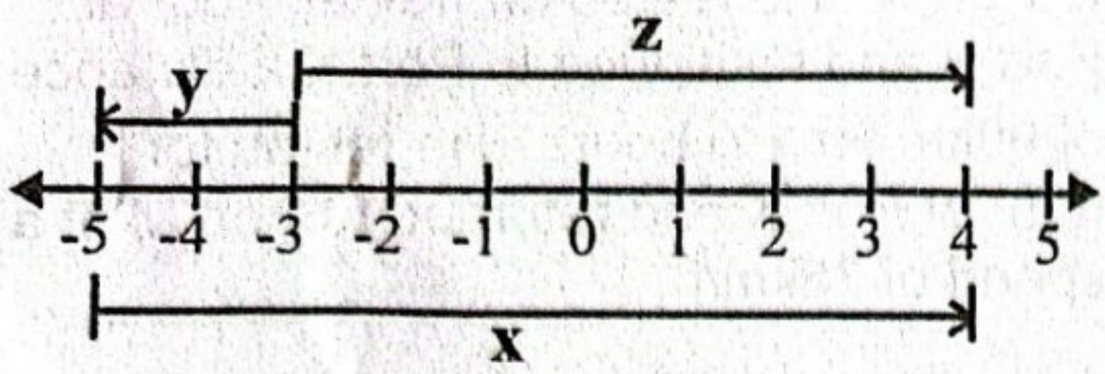
a) Draw a sketch diagram to show the route of the bus.

(1mk)

c) Find the shortest distance between Gulu city and Kafu.

(1mk)

27. Use the numberline below to answer the questions that follow.



a) Write the integers represented by letters.

(3mks)

x = _____

y = _____

z = _____

b) Write down the mathematical statement shown on the numberline.

(2mks)

28.a) Find the next number in the sequence.

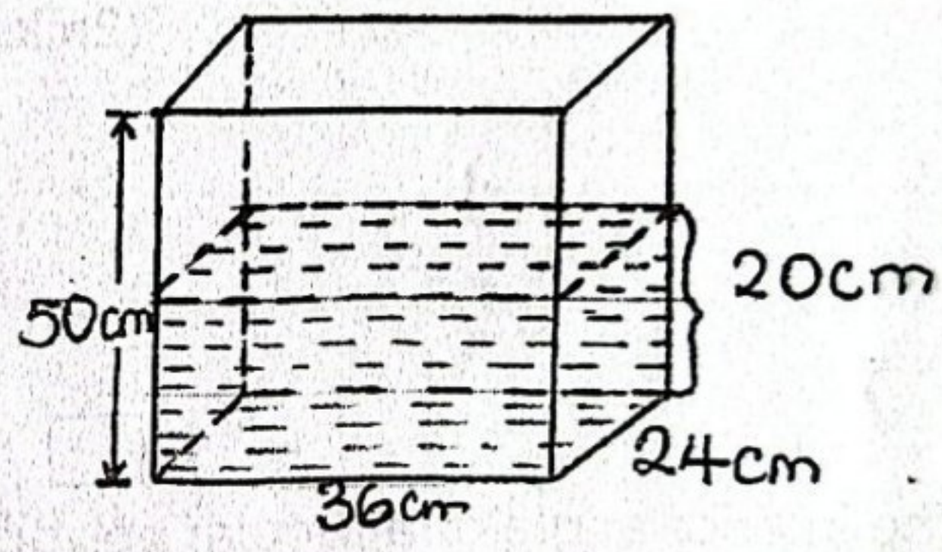
(2mks)

81, 27, 9, 3, _____

b) The L.C.M and G.C.F of two numbers are 576 and 8 respectively. If one number is 64. Find the second number.

(2mks)

29. The figure below is a cuboidal tank. Use it to answer the questions that follow.



a) Find the amount of water in the tank in litres.

(2mks)

b) How many litres of water are needed to fill the remaining part of the tank completely?

(3mks)

30. A motorist travelled from town P to town Q at a speed of 60km/h for t hours. He returned to town P at a speed of 30km/h. The total time taken for the whole journey was 9 hours.

a) Find the value of t.

(3mks)

b) Calculate the average speed for whole journey.

(2mks)

31. The interior angle of a regular polygon is 90° more than the exterior angle.

a) Find the exterior angle.

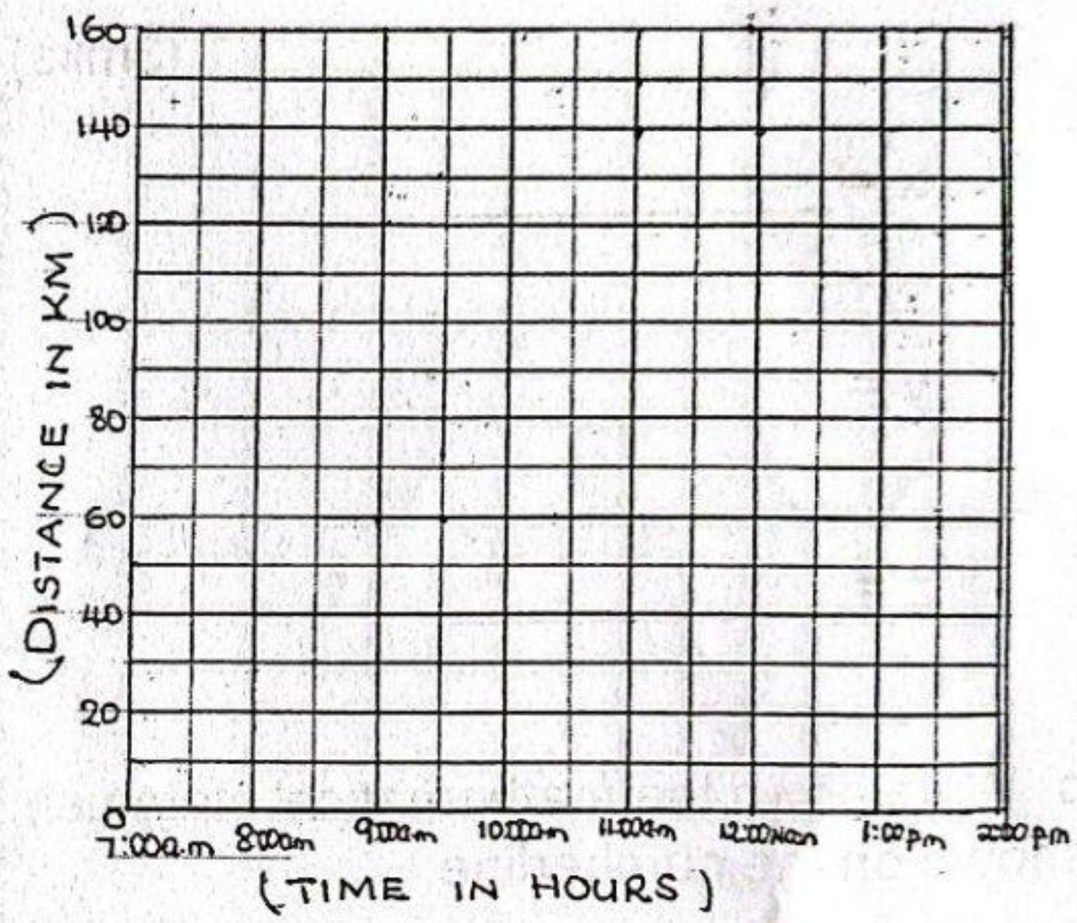
(2mks)

b) Calculate the interior angle sum of the polygon.

(3mks)

32. A sailor left port M at 7:00am and rowed for 2 hours at a speed of 30km/h to Port N. He rested for half an hour at Port N and continued to Port K a distance of 90km for 1½ hours. He rested for 1 hour at Port K and returned to Port M at a speed of 75km/h.

a) **Show the journey of the sailor on the graph below.**



b) Calculate the average speed for the whole journey.

(3mks)

END