

RUBANDA DISTRICT EDUCATION COMMITTEE
DEPARTMENT OF EDUCATION AND SPORTS
PRIMARY MOCK EXAMINATIONS 2024
MATHEMATICS

Time Allowed: 2 hours 30 Minutes

| Random No. | Personal No. |
|------------|--------------|
| | |

Candidate's Name:

Candidate's Signature:

Name of School:

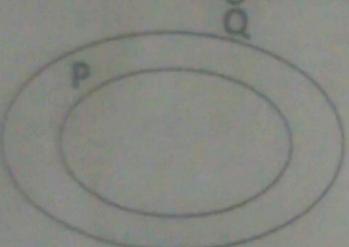
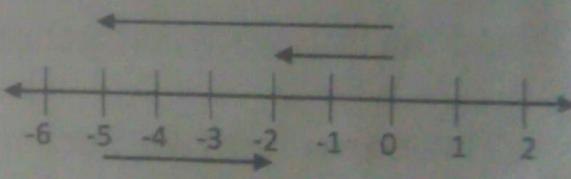
Read the following instructions carefully.

1. This paper has two Sections A and B.
2. 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 answers must be written using a blue or black ball point pen or ink. Any work written in a pencil will not be marked except diagrams.
5. No calculators are allowed in the examination room.
6. Unnecessary changes in your work and hand writing that cannot be read easily may lead to loss of marks.
7. Do not fill anything in the table indicated: "For examiner's Use only" and boxes inside the question paper.

For Examiners' Use only

| Qn No. | Marks | Exrs' No |
|--------------|-------|----------|
| 1-5 | | |
| 6-10 | | |
| 11-15 | | |
| 16-20 | | |
| 21-22 | | |
| 23-24 | | |
| 25-26 | | |
| 27-28 | | |
| 29-30 | | |
| 31-32 | | |
| TOTAL | | |

SECTION A (40 MARKS)

- | | |
|--|--|
| <p>1. Work out: 123×3</p> | <p>2. In the numeral 2m76, the value of m is 300. Which digit is represented by m?</p> |
| <p>3. Set Q = {r, e, s, t} and Set P = {s, e, t}. Show the above sets on the Venn diagram below.</p>  | <p>4. Write a mathematical sentence shown on the number line below.</p>  |
| <p>5. Express 1735 hours in 12-hour Clock system.</p> | <p>6. It is 250km from town Q to town R. Find the number of Hm between the two towns.</p> |

7. Find the value of K given that
 $5^k \times 2^3 = 200$

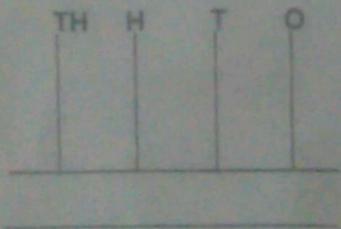
8. A vehicle covered 90km in 45 minutes. Find its speed in Km/h.

9. Solve: $2a^2 = 8$

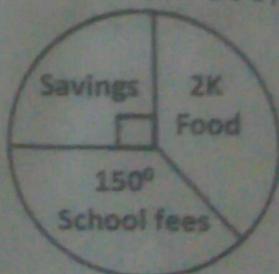
10. Write the next number in the sequence:

4, 8, 14, 22, 31, ____

11. Represent 2003 on the abacus.

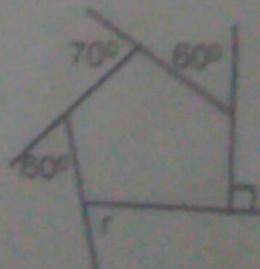


12. The pie chart below shows how a man uses his monthly income of Sh. 360,000.

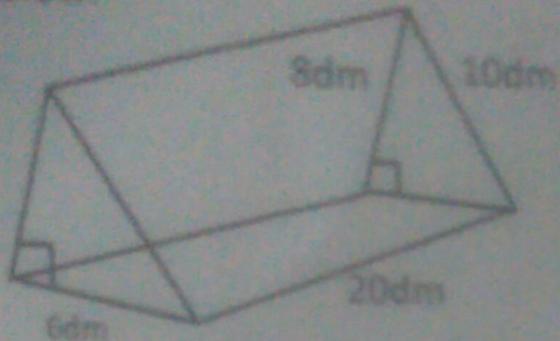


Find the value of K in degrees.

13. Find the smallest number that is exactly divisible by 9, 6, or 8
14. Use a pair of compasses and a ruler only to construct an angle of 150°
15. Given that $a = 2$ and $b = 3$
Find the value of $2b^2 + (2a)^2$
16. James, Alice and John weigh 50kg, 60kg and n respectively. If their average weight is 65kg. Find the value of n .
17. Mary has two Uganda coins, there is a cow on one coin and on another, there is a fish. Find how much money she has altogether.
18. Find the size of angle marked r in the figure below.



Find the volume of the prism below.



20 Express $\frac{5}{8}$ as a decimal

SECTION B (50 MARKS)

21 30% of the pupils in a class like Mathematics, 10% like SST, 40% like English and the rest like Science.

(a) What percentage of the pupils like Science? (2marks)

(b) How many more pupils like English than SST if there are 60 pupils in the class (3marks)

22. Below is the bus' time-table. Use it to answer the questions that follow.

| Station | J | K | L | M |
|-----------|---------|----------|----------|---|
| Arrival | 7:00 am | 12 noon | 2:00 pm | |
| Departure | 9:45 am | 11:00 am | 12:45 pm | |

(a) At what time does the bus leave from K?

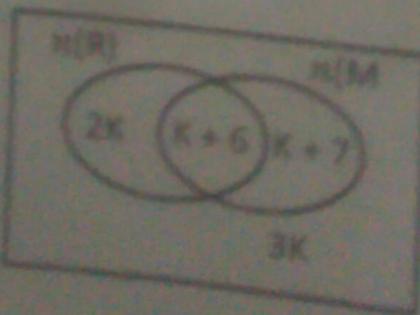
(b) How long does the bus take to travel from K to L.

(2marks)

(c) It is 315km from J to M. calculate the bus' average speed for the whole journey.

(3marks)

23. The Venn diagram below shows the number of farmers in a club who grow rice (R), millet (M) and other crops.



(a) Find the value of K given that the numbers of farmers who grow maize only are half those that grow rice. (3marks)

(b) Find the number of farmers who do not grow maize. (2marks)

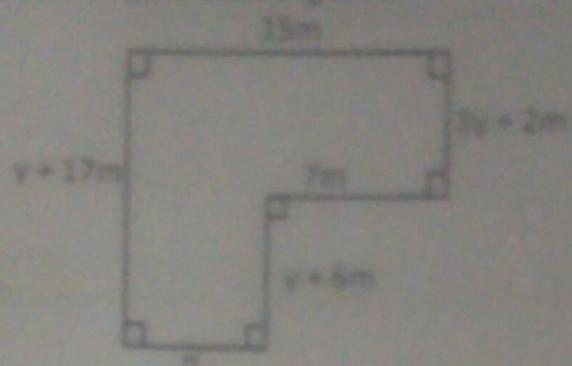
24. The mean of 3 consecutive odd numbers is 17. Find the numbers given that the largest number is K. (5marks)

25. The interior angle and the exterior angle of a regular polygon are in the ratio of 4:1.

(a) Find the number of sides of the polygon. (3marks)

- (b) Find the sum of the interior angles of the polygon.

26. The figure below shows a school garden.



- (a) Find the value of y .

(3marks)

- (b) Find the length of the garden marked n .

(2marks)



27. Town P is 300km from town Q on a bearing of 070° and Town R is 250km from town P on a bearing of 315° . Use a scale of 1cm: 50km and draw an accurate diagram showing the positions of the towns. (5marks)

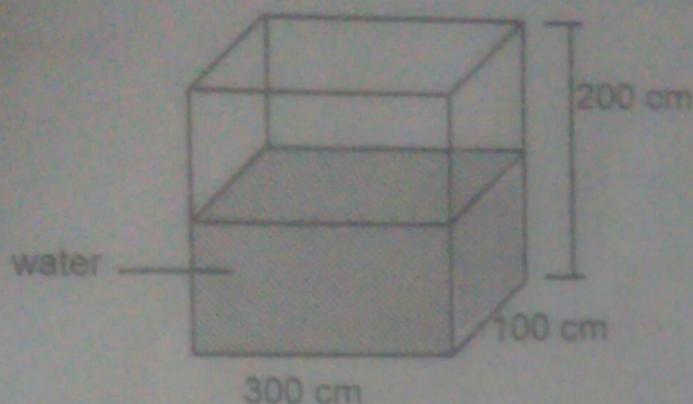
28. The cost of a book is $\frac{3}{10}$ of the cost of a mathematical set and a pencil costs Sh. 1300 less than the cost of a book.

The total cost of the 3 items is Shs 6,700. Find cost of a book. (5marks)



29. In a certain shop, $2\frac{1}{2}$ kg of rice cost sh. 10,000, 500g of sugar cost sh. 1,900 and a litter of cooking oil costs sh. 8,000.
- (a) Find the total amount of money one will pay if he buys 1kg of rice, 1kg of sugar and 250ml of cooking oil. (4marks)
- (b) Find how much his balance will be in case he goes with a fifty thousand shillings note. (1 Mark)
30. In a class, for every 2 boys, there are 3 girls. Each girl is to pay sh.20,000 for a skirt. If sh.600,000 is expected to be collected from all the girls, how many pupils are in the class? (4marks)

31. The figure below shows a cubical tank with some water.

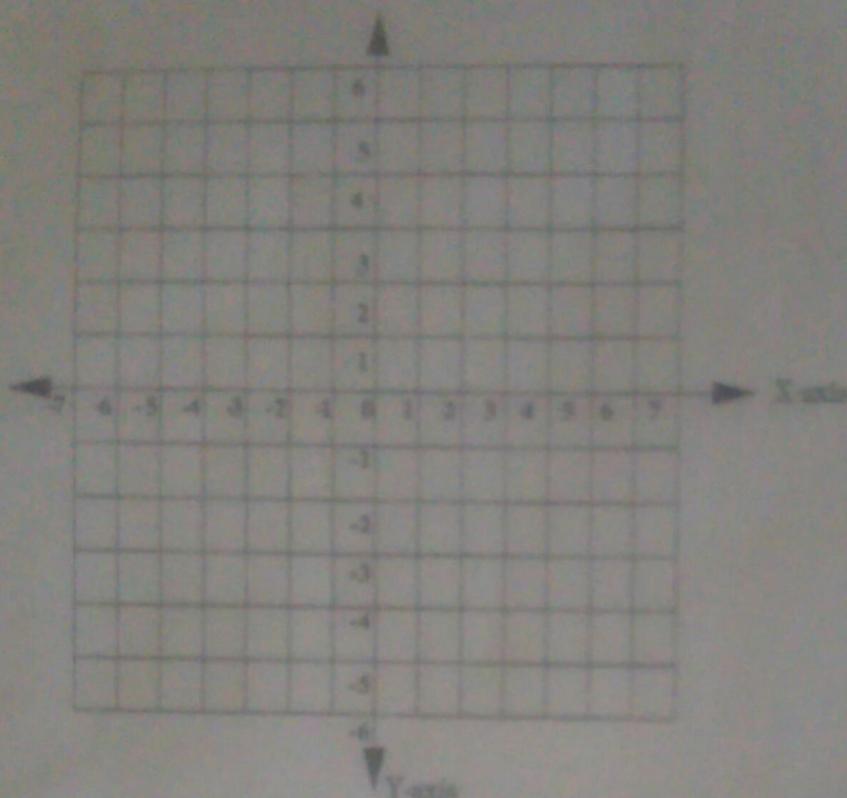


- (a) Find the volume of the tank when it is full? (2marks)
- (b) If there are 1500 litres in the tank, find the height of the tank that is not occupied by water (3marks)

32. On the grid graph below, plot points

P (-2, 4), Q (-4, -1) and R (-2, -4)

(3marks)



- (a) Plot point S on the above grid and join the plotted points to form a kite
(2marks)
- (b) How many lines of folding symmetry does the plotted figure have?
(1mark)