

SECTION.A. (40 Marks)

1. Work out: $3 \frac{2}{3}$

$$\begin{array}{r} \text{X} \quad 3 \\ \hline \end{array}$$

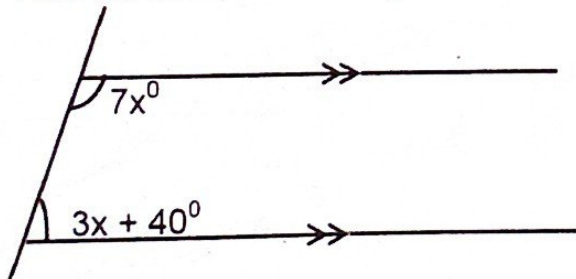
2. Express XLII in words.

3. Add: $\frac{3}{4} + \frac{2}{3}$

4. Increase 600 books in the ratio of 4:3.

5. Express 48g as kg.

6. Find the value of x in degrees.



7. Solve: $2 - 3y = 14$

8. List all factors of 18.

9. Find the smaller angle between East and South west.

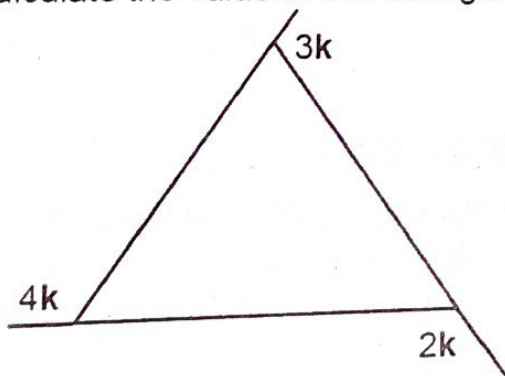
10. Simplify: $-8 - +4$

11. Given that set X has 15 proper subsets. How many elements are in set X?

12. Convert 10m/sec to km/hr.

| 13. Work out: Weeks | Days |
|---------------------|------|
| 4 | 4 |
| - 1 | 6 |
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14. Calculate the value of k in the figure below.



15. Find the LCM of 9 and 12.

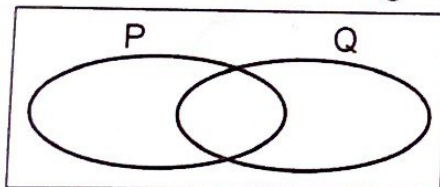
16. Find the average of 14kg, 17kg, 20kg and 13kg.

17. A car moving at a speed of 45km/hr took 40 minutes to complete the journey. Find the distance covered.

18. Find the value of 8 in the figure 2.38.

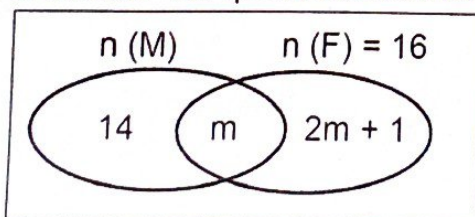
19. Convert 44_{five} to base ten.

20. Shade P' in the venn diagram below.



SECTION.B (60 MARKS)

21. The venn diagram below shows the number of pupils who eat Meat (M) and Fish (F). Use it to answer the questions that follow.



(a) Find the value of m .

(b) Find the number of pupils who don't eat meat.

(05 marks)

22. (a) Simplify: $\frac{3.6 \times 4.8}{0.24 \times 1.2}$

(b) Work out: $\frac{5}{6} - \frac{3}{8} + \frac{1}{2}$

(05 marks)

23. Elizabeth went to the market and bought the following items.

2kg of sugar at sh.4800 per kg

1½ kg of meat at sh.12000 per kg

500g of onions at sh.1000

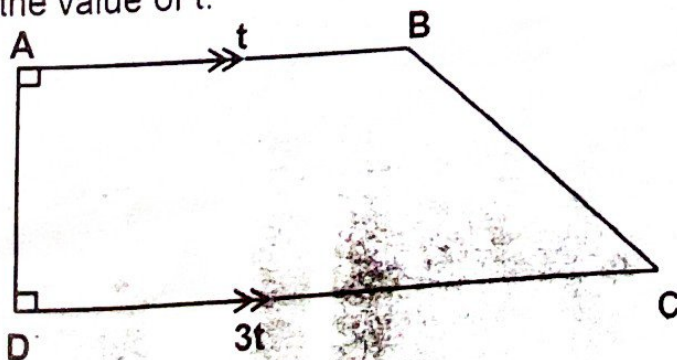
20 mangoes at sh.1000 for a heap of 5 mangoes

(a) How much money did she spend altogether?

(b) If she went with sh.40000, how much was her change?

(05 marks)

24. In the diagram ABCD below $AD = t$, $DC = 3t$ and $AB = t$. If the area of ABCD is 50cm^2 , find the value of t .



(04 marks)

25. A car uses 6 litres of petrol to cover a distance of 90km.
(a) How many litres are needed to cover 270km?

(b) How many kilometres can it cover with 9 litres?

(04 marks)

26. Using a ruler, a pencil and a pair of compasses only, construct a rhombus ABCD such that diagonals $AC = 8\text{cm}$ and $BD = 6\text{cm}$.

(04 marks)

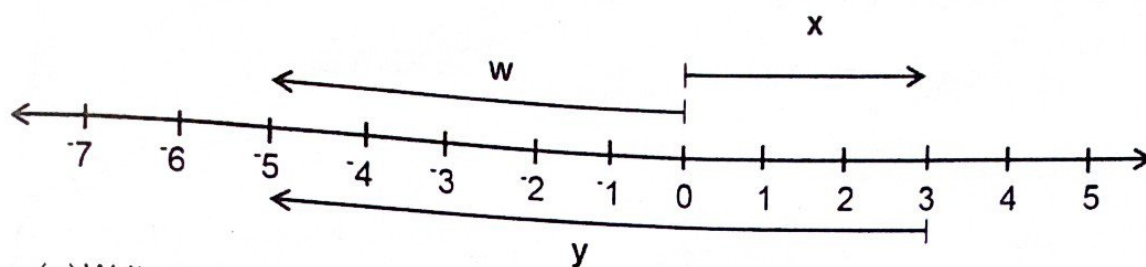
(b) Measure the length of one side.

(01 marks)

27. The Kanungu District Inspector of Schools distributed books among three schools, Nyamiyaga, Bujengwe and Karangara such that Nyamiyaga got 400 books more than Karangara and Bujengwe got twice as much as Karangara. If all schools got 1200 books altogether, how many books did each school get?

(06 marks)

28. Study the number line below and answer the questions that follow.



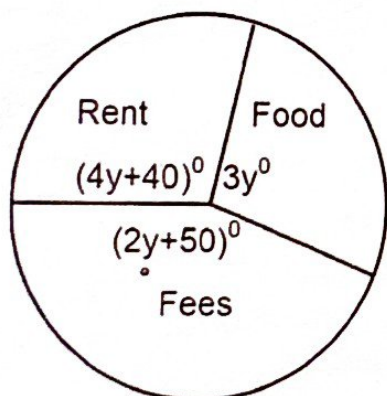
(a) Write down the integers represented by;

(i) $w =$ _____ (ii) $x =$ _____ (iii) $y =$ _____

(b) Write down the subtraction statement shown on the number line.

(04 marks)

29. The pie chart below shows how a family spends its income of sh.720000. Study it carefully and answer the questions that follow.



(a) Find the value of y .

(b) How much does it spend on rent?

(06 marks)

30. The ratio of two numbers is 2:3 and their GCF is 4.

(a) Find the LCM of the two numbers.

(02 marks)

(b) Find the two numbers.

(03 marks)

31. A motorist covered part of his journey from 7:30am to 10:30am at a speed of 50km/hr. The rest of the journey was covered in 2 hours at a speed of 80km/hr. Calculate his average speed for the whole journey.

(05 marks)

32. (a) Solve: $3(2 - x) \leq 24$

(03 marks)

(b) If $302_y = 50_{ten}$. Find the unknown base.

(03 marks)

END