

**SECTION A (40 Marks)**  
**(Each question carries two marks)**

1. Add:

$$\begin{array}{r} 2 \quad 5 \\ + 1 \quad 3 \\ \hline \\ \hline \end{array}$$

2. Given that  $X = \{3, 4, 6\}$  and

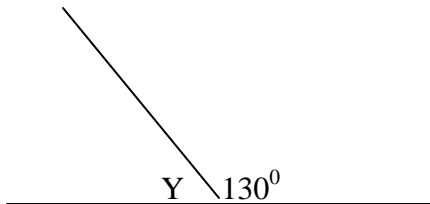
$$Y = \{4, 8, 10, 12\}$$

Find  $n(Y - X)$

3. Write in words: **90,040**.

4. Work out for:  **$5a + 2a = 21$**

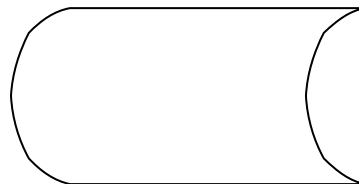
5. Find the value of **y** in the figure



6. Simplify:  $\frac{20}{24}$

7. Subtract:  $^{-}3 - ^{-}8$  using a number line

8. How many lines of folding symmetry  
has the figure below?



9). **3** mangoes cost **sh.600**

Find the cost of one mango

10). Write the next two terms in the sequence.

0, 4, 7, 11, 14, \_\_\_\_\_, \_\_\_\_\_

11. Find the mean of 10 and 12.

12. Calculate the area of a square of side 6cm.

13. A bus covered 256km in 4 hours. Calculate its average speed.

14. Find the median of the numbers: 8, 4, 6, 3, 5.

15. Write the additive inverse of  $+6$

16. Work out  $\frac{2}{3} + 1\frac{1}{3}$

17. How many elements has a set with 8 subsets?

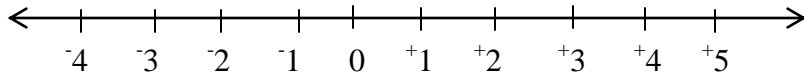
18. Express  $1101_{\text{two}}$  into base ten.

19. Solve for  $y$  in  $3y - 1 = 8$

20. Write 3721 in expanded form using place values.

**SECTION B (60 Marks)**

21. a) Use the number line to work out:  $+3 + -7$  (3Marks)



b) If the temperature is  $4^{\circ}\text{C}$  and it drops by  $2^{\circ}\text{C}$ , what is the new temperature? (2Marks)

22. Given that  $m = 4$  and  $n = 2$ , find the value of  $9n - m$  (3Marks)

a) Subtract: 20 from 15 (2Marks)

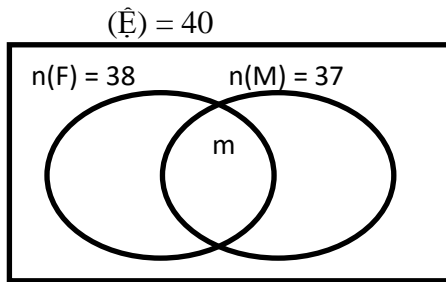
23. a) What number is expanded to become.

$(4 \times 10^3) + (7 \times 10^1) + (6 \times 10^0)$  (3Marks)

24. The Venn diagram shows pupils who eat fish (F) and pupils who eat meat (M)

a) Complete it correctly

(2Marks)



b) How many pupils eat both items?

(2Mark)

c) What is the probability of randomly picking a pupil who eats only one item from the class?

(1Marks)

25. a) Use a pair of compasses, a ruler and a pencil only to construct a square of side 4cm.

(4Marks)

b) Measure one of its diagonals

(1Mark)

26. a) A film starts at 11:20am and ends at 2:10pm. How long does it last?

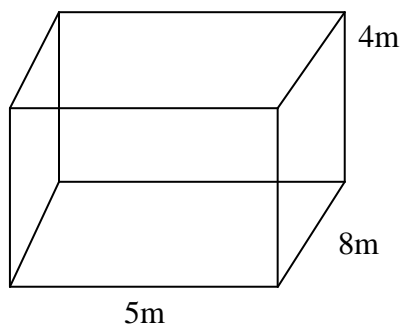
(2Marks)

b) Express 3hrs 20 min in minutes

(2Marks)

27. a) Calculate the volume of the cuboid in cubic metres.

(3Marks)



b) Express the length of the cuboid in centimetres.

28. Nairombe went to Paaya market and bought the following items.

Three kilograms of millet flour at sh. 1700 every kilogram

Two and a half kilograms of rice at sh. 2500 each kilogram

5 Heaps of tomatoes at sh. 5000.

Estimate her total bill.

b) If she had sh. 25,000, determine the money she was given as change

29. Mutooto read  $\frac{3}{4}$  of his book in the morning and the rest in the evening. If the book had 200 pages,

a) What fraction did he read in the evening? (2marks)

b) How many pages did he read in the morning? (3marks)

30. a) Solve for k:  $3 + 5k = 28$

(2Marks)

b) Simplify:  $3m - 4n + 7m + 9n$

(2marks)

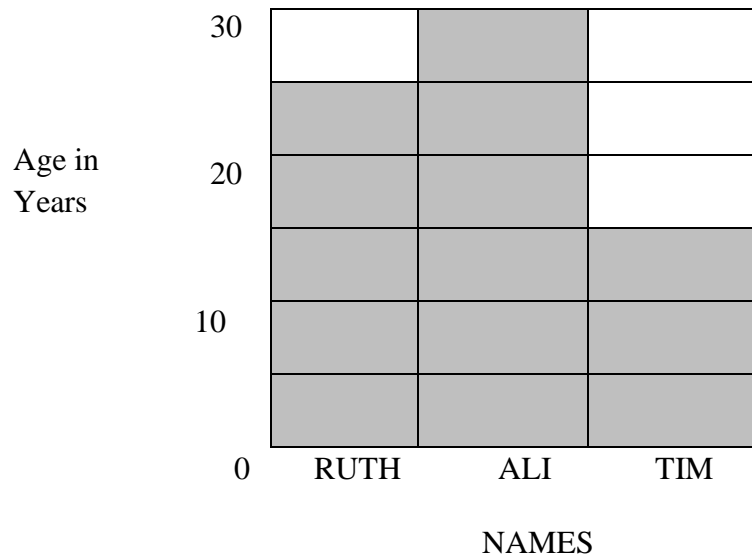
31. The area of a rectangular block is  $60\text{cm}^2$ . Find its width if the length is 15cm (3marks)

b) Find its perimeter.

(2Marks)



32. The graph below shows ages of three people. Study it and use it to answer the questions that follow.



a) What is the age of the youngest person?

(1 mark)

b) By how many years is Ali older than Ruth?

(2 marks)

c) What is the average age of the people shown on the graph?

(3 marks)

