

Section A (40marks)

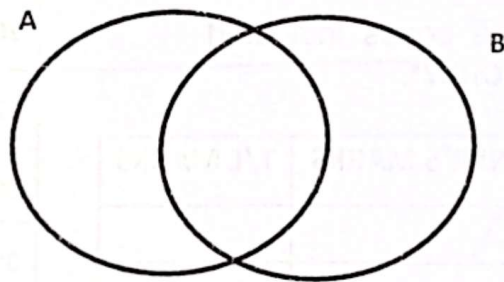
1. Add: $36 + 41$.

2. Write 44,019 in words.

3. Find the sum of the numbers in the next pair in the sequence.
(1,3),(2,5),(3,7),(4,9)_____

4. Simplify: $2\frac{1}{4} \times 8$.

5. Shade $(A \cup B) - (A \cap B)$ in the diagram below.



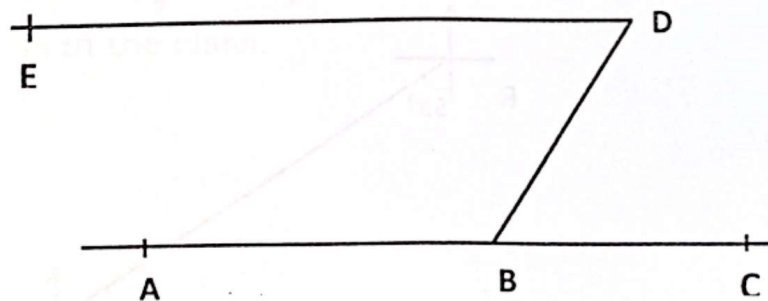
6. Given that $A = 90$, $h = 6$ and $b = 18$. Find the value of a in

$$A = \frac{1}{2} h (a + b).$$

7. Convert 4m^2 to cm^2

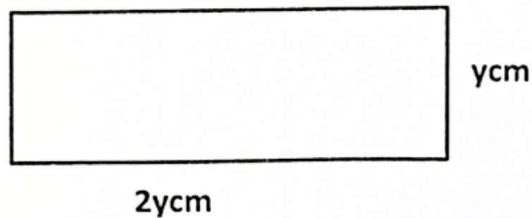
8. The cost of 3 rulers is Sh.2250. How many more rulers can one buy with Sh.3750?

9. Using a pair of compasses, a ruler and a sharp pencil, bisect angle BDE.



10. What is $12\frac{1}{2}\%$ of 32 cups?

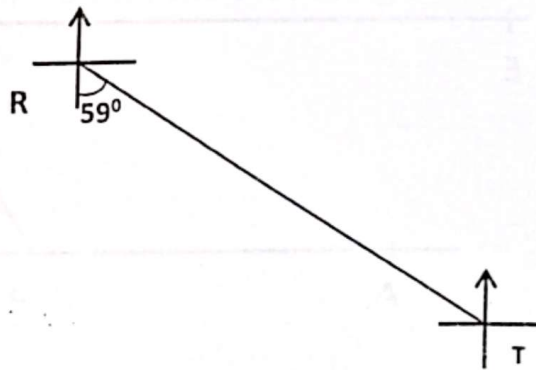
11. Find the **area** of the rectangle below.



12. Solve the inequality and list 4 possible values of k .

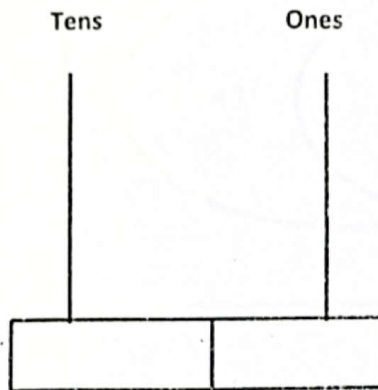
$$8 - 4k < 20$$

13. Use the diagram below to find the true bearing of R from T.



14. Name the polygon with 10 right angles .

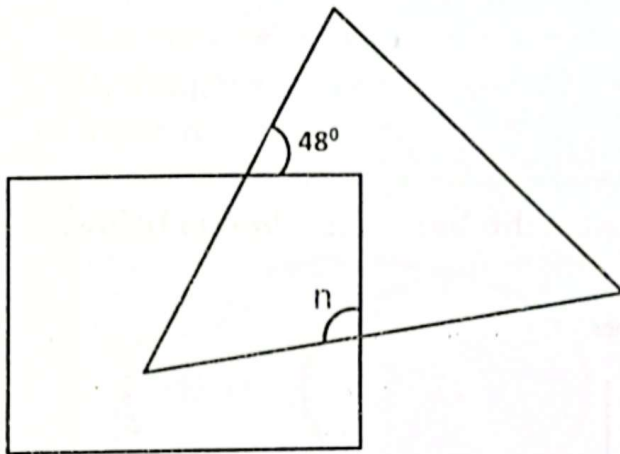
15. Represent 22_{four} on the base ten abacus below.



16. Solve the equation: $3^{2n} \div \frac{1}{9} = 1$.

17. In a class, $\frac{3}{7}$ are boys and the rest are girls. Find the ratio of boys to girls in the class.

18. In the diagram below, a **square** and an **equilateral triangle** are placed together. Find the value of angle n .

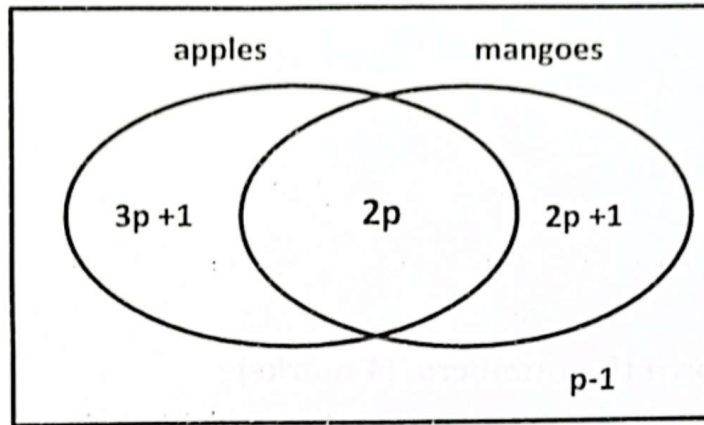


19. Kasozi had 20 notes of Sh.20,000 numbered consecutively up to TQ0512. Find the serial number of the first note.

20. Given that $4 - 5 = 6(\text{modulo } k)$. Find the value of k .

SECTION B (60 MARKS)

21. The diagram below is a summary of the number of pupils who ate apples (A), mangoes (M) and those who did not eat any of the two types of fruits at a party.

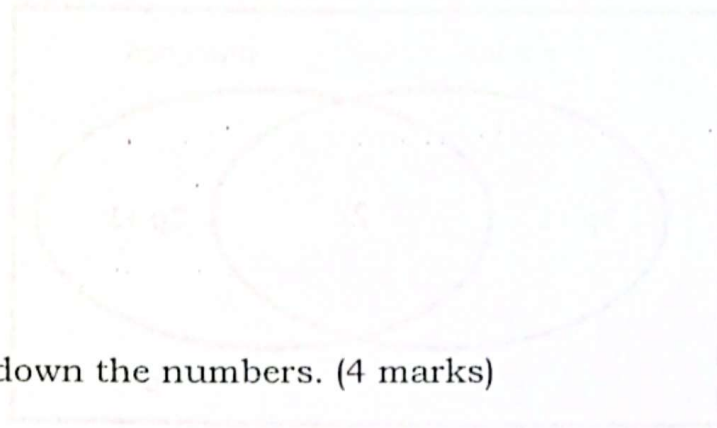


a) Given that 30 pupils ate at least a fruit, find the value of p .
(2 marks)

b) How many pupils did not eat mangoes? (2 marks)

22. The median of four (4) consecutive odd numbers is 10.
The 4th number is $y-1$.

a) Find the value of y . (2 marks)



b) List down the numbers. (4 marks)

23. a) Work out: $\frac{1}{2} - \frac{4}{9} + \frac{5}{6}$ (3 marks)

b) Simplify: $\frac{0.8 \times 0.9}{0.24 \times 6}$ (3 marks)

24. Using a pair of compasses, a ruler and a sharp pencil only, construct a rectangle UEDC in which $UE = 7\text{cm}$ and $ED = 4\text{cm}$. (4marks)



- b) Measure angle EUD

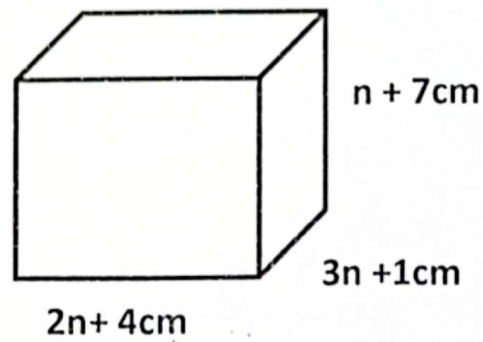
(1 mark)

25. In a class, 80% are boarders and there are 72 day scholars.

- a) How many pupils are in the class? (3 marks)

b) How many more boarders than day scholars are there?(2marks)

26. The diagram below is a cube.



a) Find the value of n . (2marks)

b) Work out the total surface area of the cube. (3marks)

27. Tom left Town A at 10:50am travelling at an average speed of 72km/hr and he reached Town B at 1:05pm. He rested for $\frac{1}{4}$ hr at B before continuing to Town C, a distance of 120km from Town B. He reached Town C at 2:50pm.

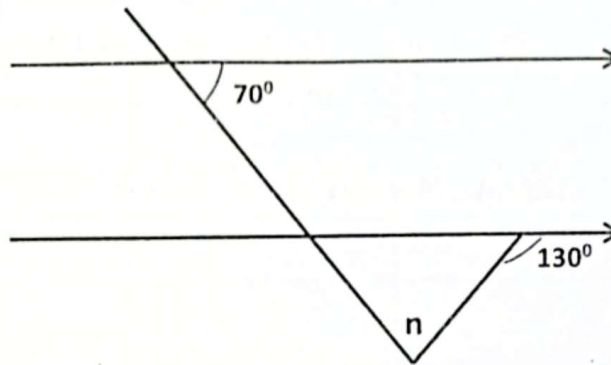
a) Find the distance between Town A and Town B. (2marks)

b) At what speed was he travelling between Town B and Town C? (2 marks)

28. a) Angles $(2k - 40^\circ)$ and 30° are supplementary.
Find the value of k.

(2marks)

- b) Study the diagram below and use it to find the value of n .
(2 marks)



29. Allan, Tom and Alex shared some pens in the ratio of 3:5:2 respectively. Tom and Alex got 28 pens altogether.

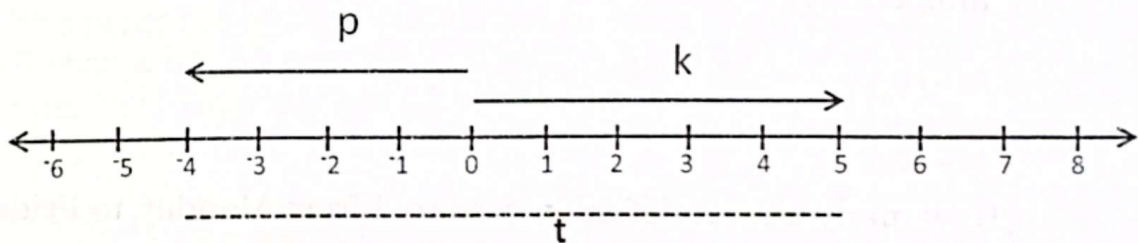
a) How many pens did all the three people share? (3marks)

- b) Write the number of pens Allan got in Scientific notation. (2 marks)

30. The bill below was prepared by AGGIE GROCERS for Paula.
Use the give data to complete the bill table. (5 marks)

ITEMS	QUANTITY	UNIT COST	AMOUNT
beans	$2\frac{1}{4}$ kg	Sh.6000	Sh._____
soap	_____ bars	Sh.4,800	Sh.7200
rice	$\frac{1}{2}$ kg	Sh._____	Sh._____
milk	3.5 litres	Sh._____	Sh.11,200
TOTAL	EXPENDITURE		Sh.33,800

31. Use the number line below to answer given questions.



- a) Write the integers. (1mark each)

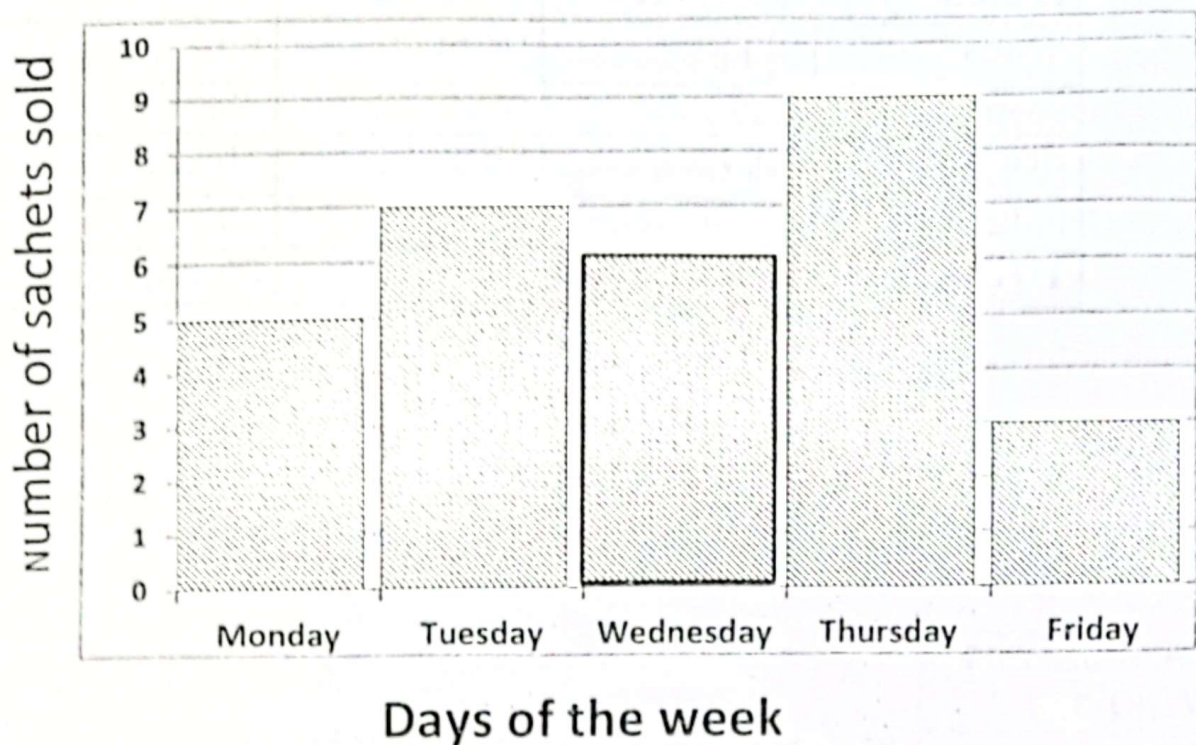
i) $k =$ _____

ii) $p =$ _____

- b) Show the direction of the integer represented by arrow **t**.
(1 mark)

- c) Write the mathematical sentence for the number line above.
(2marks)

32. The graph below shows the number of half - litre sachets of milk sold by a shopkeeper on different days.



a) How many litres of milk were sold on Monday and Tuesday altogether?

b) How many sachets of milk were sold from Monday to Friday?
(2marks)

c) Given that the shopkeeper buys each litre at sh.3600 and sells it at a profit of 10%, calculate the total profit he earned from all the milk he sold. (2marks)

END