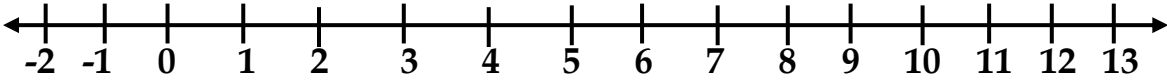
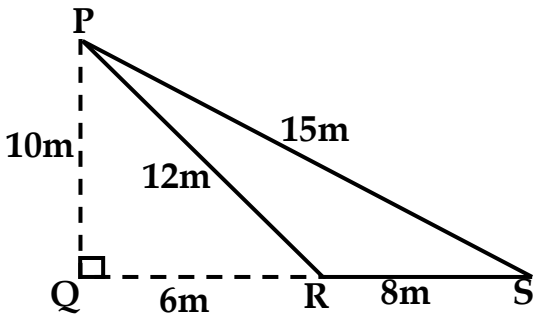


Section A (40 Marks)

1	Work out: 302×3	2	Write 0.75 as a fraction in its simplified form.
3	Express 40044 in words. /	4	Given that; set $A = \{ C, O, V, I, D, 19 \}$ How many proper sub sets are in set A?
5	Work out 3×4 using a number line below. 		
6	Find the next number in the sequence below. 3, 3, 5, 9, 15, _____	7	Change 5mls to km/hr.
8	Work out the median of: 9, -7, 0, 2, 6, and -2.	9	Expand 7628 using exponents.

10	Write the place value of 0 in 1110 _{two} .	11	Round off 89.972 to the nearest tenths.
12	Draw tallies to represent 23 boys.	13	A staff meeting which ended at 11:25am lasted for 40 minutes. At what time did it start?
14	Using a pair of compasses, a ruler and a pencil only, construct an angle of 135°.		
15	Solve: $2(4 - 5p) = -22$	16	Work out: $1\frac{2}{3} - \frac{3}{4}$

17	Express 7364.5 in standard form.	18	If 3 books cost sh.4500, how many books will be bought with sh.16500?
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19	<p>Work out the area of triangle PRS.</p>  <p>The diagram shows a triangle PRS. A dashed line segment PQ is drawn from vertex P to the base QS, such that PQ is perpendicular to QS (indicated by a right-angle symbol at Q). The length of PQ is 10m. Point R lies on the base QS. The length of QR is 6m and the length of RS is 8m. The side length PR is 12m and the side length PS is 15m.</p>	20	<p>Work out: m cm</p> $\begin{array}{r} 7 \quad 55 \\ + 2 \quad 70 \\ \hline \end{array}$
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Section B (60 Marks)

21	<p>(a) Change 1011_{two} to decimal base. (02 marks)</p>
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(b) Write XCVI in Hindu-Arabic numerals.

(02 marks)

(c) Work out the value of 7 in 37048.

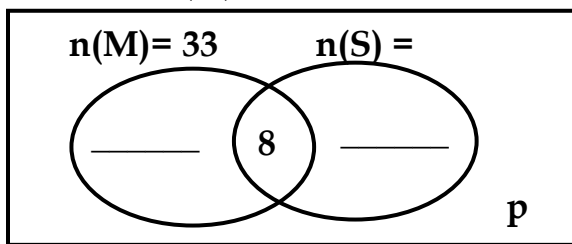
(01 mark)

22 In a class of 60 pupils, 33 like Mathematics (M), 21 like Science (S) only, 8 like both subjects while P like none of the mentioned subjects.

(a) Complete the Venn diagram below.

(02 marks)

$$n(\mathcal{E}) = 60$$



(b) Find the value of P.

(02 marks)

(c) What is the probability of choosing a pupil at random that she/he does not like Science at all?

(01 mark)

23

Rose went to the market and bought the following items.

(a) Complete the table below.

Item	Quantity	Unit price	Total cost	
Soap	3 bars	sh. _____	sh. 11100	(01 mark)
Sugar	2kg 500gm	sh.3500	sh. _____	(01 mark)
Rice	_____kg	sh.4200	sh.5600	(01 mark)
Total expenditure			sh. _____	(02 marks)

24

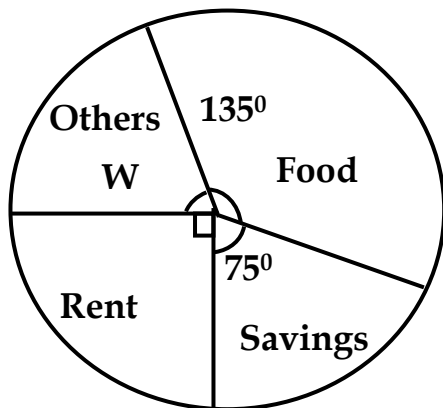
(a) Gladys is three times as old as her daughter Whitney. The difference between their ages is 58years. How old is Gladys? (03 marks)

(b) Simplify: $3W - (3 - 2W)$ (01 mark)

25	<p>(a) Using a pair of compasses, a ruler and a sharp pencil only, construct triangle VTU where by line VT = 6cm, angle VTU = 90° and angle V = 30° (04 marks)</p> <p>(b) Measure line VU (01 mark)</p>
26	<p>(a) Workout: $\frac{2.4 \times 0.03}{0.2 \times 0.18}$ (03 marks)</p> <p>(b) If $\frac{3}{4}$ of a number is 12, what is the number? (02 marks)</p>

- 27 The sum of 3 consecutive even numbers is 36. If the largest number is P:
 (a) Find the value of P. (03 marks)
- (b) Work out the product of the 2nd and 3rd numbers. (02 marks)

- 28 The pie-chart below shows how a teacher spends his monthly salary of sh.104,000. Use it to answer the questions that follow.

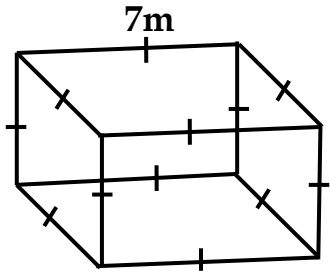


- (a) Find the value of W. (02 marks)
- (b) How much more money does he spend on Food than Rent? (02 marks)

(c) Express the sector for Rent as a percentage.

(01 mark)

29 Use the figure below to answer the questions that follow.



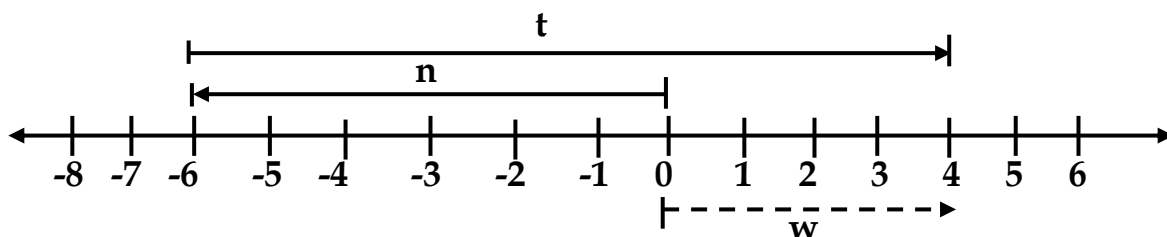
(a) Calculate its total surface area.

(03 marks)

(b) Work out its volume.

(03 marks)

30 Use the number line below to answer the questions that follow.



(a) Write the integers represented by:

(01 mark each)

$n =$ _____ $t =$ _____ $w =$ _____

	(b) Write the mathematical statement shown on a number line. (02 marks)
31	<p>(a) Work out the square root of 0.81. (02 marks)</p> <p>(b) Without dividing, show if 2046 is divisible by 6. (02 marks)</p> <p>(c) Use distributive property only to work out. $(36 \div 3) + (12 \div 3)$ (02 marks)</p>
32	<p>A motorist left home driving at a speed of 60km/hr for 2 hours to town. He rested for half an hour before continuing to the market at a speed of 80km per hour where he reached in $1\frac{1}{2}$ hours later. Calculate the average speed of the whole journey. (04marks)</p>