

TEST 1

Section 1 (Test 1)

1. 5,321,964: Five million, three hundred and twenty-one thousand, nine hundred and sixty four.

2. 61

$$3. 12\frac{1}{2}\% = \frac{25}{200} = \frac{1}{8}$$

$$4. \begin{array}{r} 4.08 \\ \times 0.6 \\ \hline \end{array}$$

2.448

$$5. 37 \times 25 = (37 \times \boxed{20}) + (37 \times 5)$$

$$6. \begin{array}{l} \text{Area} = 169\text{cm}^2 \\ \text{Length of Square} = \sqrt{169} = 13\text{cm} \end{array}$$

$$7. \frac{27}{1} \times \frac{10}{3} = 90$$

8. $25 \times 8 = 200 + 5 = 205$ sweets

9. $529 \times 50 = 26,450$

10. $136 \div 4 = 34$ books per shelf

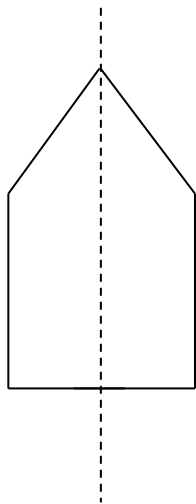
11. Volume of Cuboid = $12\text{cm} \times 12\text{cm} \times 6\text{cm} = 864\text{cm}^3$

12. $220 \div 60 = 3\frac{2}{3}$ hrs

13. Lamp post = 3m

14. 6:50 a.m.

15.

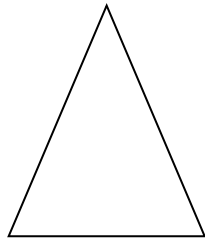


16. Mathematics = ~~III~~ ~~III~~ II

17. G H

18. Modal Age = 12 yrs

19.



20. $19 \times 10 = 190$ boys

Section 2 (Test 1)

21. $40\% = 240$

$$\frac{40}{100} = 240$$

$$\frac{4}{10} = 240$$

Therefore, $\frac{10}{4} \times \frac{240}{1} = 600$

Number = 600

22. Girls = $\frac{2}{5}$

Boys = $\frac{3}{5}$

Boys = $\frac{3}{5} \times \frac{35}{1} = 21$ boys

23. Cost Price = \$5,600

$$\text{V.A.T.} = 12\frac{1}{2}\% = \frac{1}{8}$$

$$\text{V.A.T. on C.P.} = \frac{1}{8} \times 5,600 = \$700$$

$$\text{Total Price} = \$5,600 + \$700 = \$6,300$$

24. Yes, Anya is correct. She saw that her **remainder of 6** could give **1** more group of '**4**' so she added **1** more to **12** and got **13**. Her remainder was then **2**. Anya then arrived at an answer of **13**, remainder **2**.

25. Oranges = N

$$\text{Mangoes} = 3 \times N$$

Therefore, $N + 3N = 4N$ (4N is Oranges and Mangoes together)

$$4N = 640$$

$$N = 640 \div 4 = 160$$

$$\text{Oranges} = 160$$

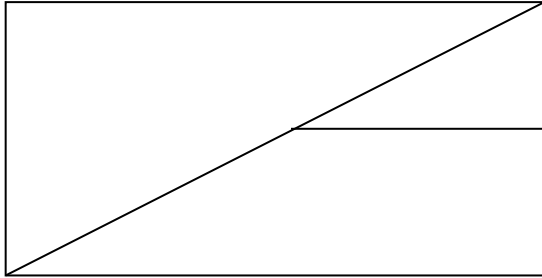
$$\text{Mangoes} = 3 \times 160 = 480$$

160 Limes added

$$\text{Total Fruits} = 640 + 160 = 800$$

$$\text{Mangoes} = \frac{480}{800} \times 100 = 60\%$$

26.



27. Average = 68 marks

$$\text{Total} = 68 \times 4 = 272 \text{ marks}$$

$$\text{New Average} = 70$$

$$\text{New Total} = 68 \times 5 = 350 \text{ marks}$$

$$\text{Therefore, Marks needed} = 350 - 272 = 78 \text{ marks}$$

$$28. \text{ S.I.} = P \times R \times T = \frac{36,000 \times 12 \times 3}{100} = \$12,960$$

$$\text{Money to Repay} = \$36,000 + \$12,960 = \$48,960$$

$$29. \text{ Pumpkin} = 3 \text{ kg } 20 \text{ g} = 3000 \text{ g} + 20 \text{ g} = 3,020 \text{ g}$$

$$4 \text{ Pieces} = 3,020 \text{ g}$$

$$\text{Therefore, 1 piece} = 3,020 \div 4 = 755 \text{ g}$$

$$30. \text{ Snacks} = \frac{1}{5}$$

$$\text{Dinner} = \frac{3}{10}$$

$$\text{Total Spent} = \frac{1}{5} + \frac{3}{10} = \frac{2}{10} + \frac{3}{10} = \frac{5}{10} = \frac{1}{2}$$

$$\text{Allowance Left} = \frac{2}{2} - \frac{1}{2} = \frac{1}{2}$$

$$31. \text{ Company A} = \text{Reg Time } 10 \text{ hrs} = \$40 \text{ per hour} = 10 \times \$40 = 400$$

$$\text{Over Time} = \text{One Half times Reg rate}$$

$$= 1 \frac{1}{2} \times 40 = \frac{3}{2} \times \frac{40}{1} = \$60 \text{ per hour}$$

$$2 \text{ hours Over Time} = \$60 \times 2 = \$120$$

$$\text{Total Earnings} = \$400 + \$120 = \$520$$

$$\text{Company B} = \text{Reg Time } \$45 \text{ per hour} = \$45 \times 12 \text{ hrs} = \$540$$

Company B offers a better wage.

$$32. \quad 90^\circ = 0$$

$$> 90^\circ = A, C$$

$$< 90^\circ = B, D$$

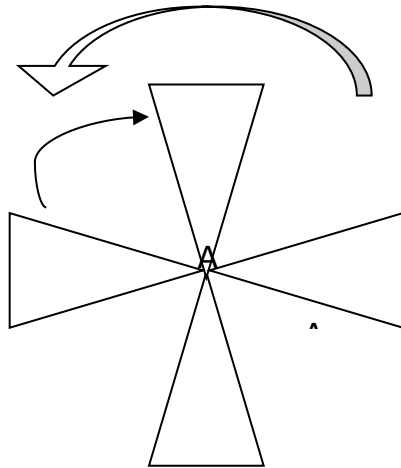
33.

| ITEM | COST PER PORTION | QUANTITY | COST |
|---------------|------------------|----------|-------------|
| Fried Rice | \$ 25.00 | 1 | \$ 25.00 + |
| Fried Chicken | \$ 45.00 | 1 + 1 | \$ 90.00 + |
| Pepper Shrimp | \$ 60.00 | 2 | \$ 120.00 + |
| Gin. Beef | \$ 30.25 | 1 + 1 | \$ 60.50 |
| TOTAL | | | \$ 295.50 |

\$ 25.00 +
 \$ 45.00 +
 \$ 120.00 +
\$ 30.25
\$ 220.25

\$ 295.50 -
 \$ 220.25
\$ 75.25

34.



2 - 90° turns anti-clockwise
 1 - 90° turn clockwise

35.

$$\begin{array}{r} 12 \times \$100 = \$1,200.00 + \\ 45 \times \$ 20 = \$ 900.00 + \\ 2 \times \$ 50 = \$ 100.00 + \\ 9 \times \$ 10 = \$ 90.00 + \\ 75 \times \$0.25 = \$ 18.75 + \\ 6 \times \$0.10 = \$ 00.60 \\ \hline \text{Amt Deposited} = \$ 2,309.35 \end{array}$$

36. Area of Triangle = 42cm^2

$$\text{Triangle} = \frac{1}{2} \text{Rectangle}$$

$$\text{Therefore, Area of Rectangle} = 42\text{cm}^2 \times 2 = 84\text{cm}^2$$

The triangle is half the area of the rectangle so we multiply the area of the triangle by 2 to get the area of the rectangle.

37. Vol. of Cuboid Tank = $8,000\text{cm}^3$

$$\text{Area of Base} = 800\text{cm}^2$$

$$\text{Depth of Tank} = \frac{8000}{800} = 10 \text{ cm}$$

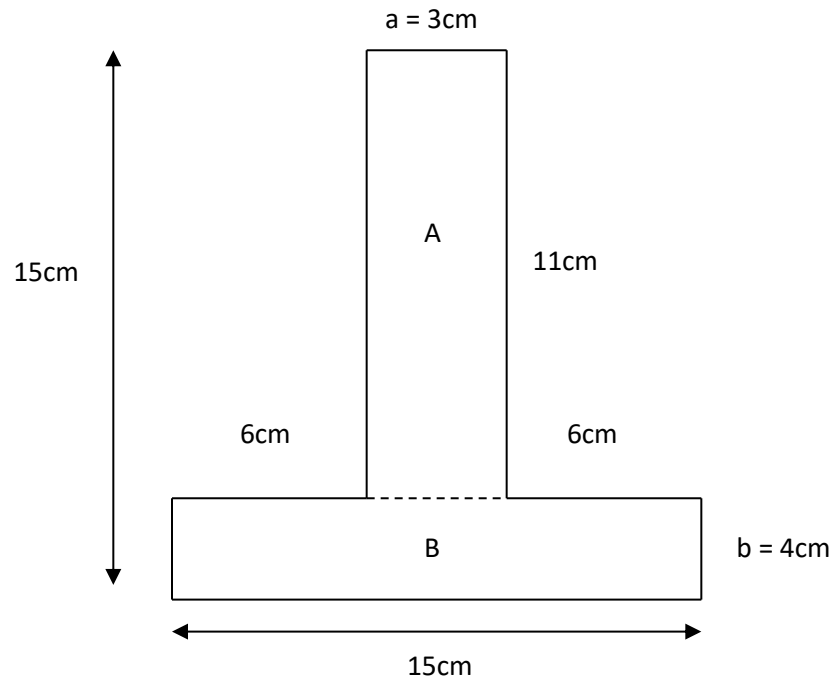
38. Total weight of Packages = $900 \text{ g} + 2.45\text{kg} + 2,030 \text{ g} + 3.02 \text{ kg}$

$$= 0.900 + 2.45 + 2.030 + 3.02$$

$$= 8.4 \text{ kg}$$

$$\text{Mean} = 8.4 \text{ kg} \div 4 = 2.1 \text{ kg (or 2100 g)}$$

39.



$$b = 15\text{cm} - 11\text{cm} = 4\text{cm}$$

$$a = 15\text{cm} - (6\text{cm} + 6\text{cm}) = 15\text{cm} - 12\text{cm} = 3\text{cm}$$

$$\text{Area of A} = 11 \times 3 = 33\text{cm}^2$$

$$\text{Area of B} = 15 \times 4 = 60\text{cm}^2$$

$$\text{Total Area} = 93\text{cm}^2$$

40. Average Height = 9cm

Therefore, Total Height = $9 \times 4 = 36\text{cm}$

Day 1 = 4cm +

Day 2 = 8cm +

Day 4 = 14cm

Total = 26cm

Height for Day 3 = $36\text{cm} - 26\text{cm} = 10\text{cm}$

Section 3 (Test 1)

41. Peppers Picked = 800

Rotten = $25\% = \frac{1}{4} = \frac{1}{4} \times \frac{800}{1} = 200$ peppers

Peppers Left = $800 - 200 = 600$ peppers

Market = $\frac{2}{3} \times 600 = 400$ peppers

No. of Bags = $400 \div 100 = 4$ bags \times \$50 = \$200

Peppers Left = $600 - 400 = 200$

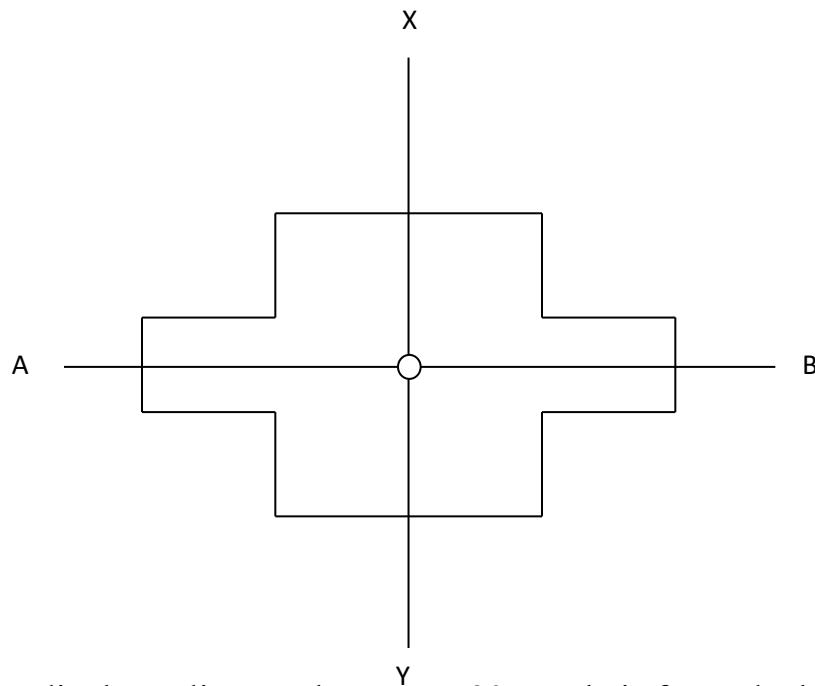
No. of Heaps = $200 \div 5 = 40$ heaps @ \$10 per heap = \$400

Total Money Made From Sales = $\$200 + \$400 = \$600$

42. Distance between 5th and 9th post = 5 posts + 4 spaces
 = 17 m
 5 posts = 1m x 5 = 5m
 Therefore, 4 spaces = 17 m - 5 m = 12 m
 1 space = 12m ÷ 4 = 3m

Length of Driveway = A = 27 posts x 1m = 27m +
 B = 26 spaces x 3m = 78m
 ————105m

43.



XO is perpendicular to line OB because a 90° angle is formed where these two lines meet.

$$44. \text{ Monday and Thursday} = 30\% \\ 3,520 + 3,980 = 7,500 = 30\%$$

$$\text{Total Produced} = \frac{100}{30} \times 7,500 = 25,000$$

$$\text{Wednesday's Production} = 0.2 \text{ of } 25,000 = \frac{2}{10} \times 25,000 \\ = 5,000$$

$$\text{Friday} = x$$

$$\text{Tuesday} = 3x$$

$$\text{Total} = 4x$$

$$4x = 25,000 - (7,500 + 5,000) = 25,000 - 12,500$$

$$4x = 12,500$$

$$x = 12,500 \div 4 = 3,125$$

$$\text{Tuesday} = 3,125 \times 3 = 9,375$$

$$\text{Friday} = 3,125$$

45.

| Colours | Tally | Frequency | Total Points |
|---------|---------------------------------|-----------|--------------|
| Red | II | 2 | 2 |
| Blue | III III | 8 | 16 |
| Green | III | 3 | 9 |
| Yellow | III II II | 12 | 48 |

25 tries - 17 tries = 8 tries for Blue

Modal Color : Yellow

Mean Points: $48 + 9 + 16 + 2 = 75$

$$75 \div 25 = 3$$