

TEST 9

SECTION 1

1) $65,212.79 = \frac{9}{100}$

2) Composite Numbers = 4, 6, 8, 9
 $4 + 6 = 10$

3)
$$\begin{array}{r} 16.3 \\ + 7.25 \\ \hline 23.55 \end{array}$$

4) $3^{+3}, 2^{+2}, 6^{+3}, \underline{9^{+3}}, 6^{+2}, 12 = \underline{9}$

5) $9^2 - \sqrt{196} = 81 - 14 = 67$

6) $\frac{12 \div 6}{36 \div 6} = \frac{b}{6}, b = 2$

7) $96 \div 7 = 13$ gifts

8) c, b

9) $1 \times \$50 = \$ 50.00$
 $6 \times \$20 = \120.00
 $3 \times \$5 = \$ 15.00$
 $3 \times .25 = \underline{\quad}.75$
 $\underline{\$185.75}$

10)
$$\begin{array}{r} 533 \\ + 669 \\ \hline 1202 \end{array}$$

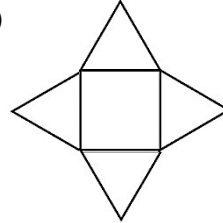
11) $3.5\text{cm} \approx 4\text{cm}$

12) $\frac{5}{8}$

13) $.750$ kg (750g)
 1.020 kg
 $\underline{\quad}.910$ kg (910g)
 $\underline{2.680}$ kg

14) 31st January

15)




16) $\frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$

17) 8 sides \times 8 = 64cm

18) $12 - 8 = 4$ more students

19) $8 \times 4 = 32$ ice-creams
 $42 - 32 = 10$

$10 \div 4 = 2 \frac{1}{2} =$ 

20) Nickelodeon

SECTION 2

21) $6\frac{3}{4} \times 3\frac{3}{5} = \frac{27}{4} \times \frac{18}{5} = \frac{243}{10} = 24\frac{3}{10}$

22) $\frac{1}{3} = 27$
 $\therefore \frac{3}{3} = 27 \times 3 = 81$
 $N + 59 = 81$
 $N = 81 - 59 = 22$

23) $55\% = \frac{55}{100} = \frac{11}{20}$
 $\frac{11}{20} = 110$
 $\frac{20}{11} \times \frac{110}{1} = 200$

TEST 9

$$\begin{aligned}
 24) \text{ Walked} &= 1.05 \text{ km} \\
 \text{Cycled} &= + 2.350 \text{ km (2,350m)} \\
 \text{Total Covered} &= \underline{3.400 \text{ km}}
 \end{aligned}$$

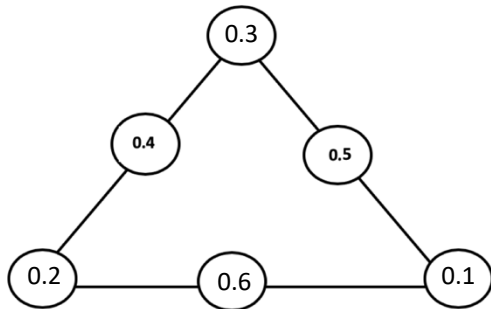
$$\begin{aligned}
 \text{Triathlon Course} &= 5.500 \text{ km} \\
 \text{Subtract Walked + Cycled} &= - 3.400 \text{ km} \\
 \text{Ran} &= \underline{2.100 \text{ km}}
 \end{aligned}$$

$$\begin{aligned}
 25) \text{ Discount} &= 25\% \\
 100\% - 25\% &= 75\% \\
 \text{Sale Price} &= \frac{75}{100} \times \frac{475}{1} = \$356.25
 \end{aligned}$$

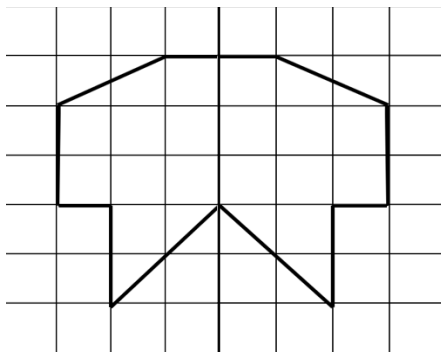
$$\begin{aligned}
 26) \text{ Factory A} &= 150 \text{ computers per day} \\
 \text{Factory B} &= 150 + 70 \\
 &= 220 \text{ computers per day} \\
 \text{Total Produced} &= 150 + 220 \\
 &= 370 \text{ computers per day} \\
 \text{Amount of Computers Produced} &= 4,070 \\
 \therefore \text{No. of Days to Produce} &= 4,070 \div 370 \\
 &= 11 \text{ days}
 \end{aligned}$$

$$\begin{aligned}
 27) \text{ Allan} &= 3 \times \$65 = \$195 \\
 \text{Peter} &= \$270 \div 45 = 6 \text{ Days} \\
 \text{Keith} &= \$630 \div 9 = \$70 \text{ per day}
 \end{aligned}$$

28)



29)



$$\begin{aligned}
 30) \text{ Pumpkin} &= 2050\text{g} \div 1000 \\
 &= 2.050\text{kg} \approx 2\text{kg}
 \end{aligned}$$

$$31) \text{ S.I.} = \frac{P \times R \times T}{100} = \frac{\$12,000 \times 12 \times 4}{100} = \$5,760$$

$$\begin{aligned}
 \text{Amt. To Repay} &= \$12,000 + \$5,760 \\
 &= \$17,760
 \end{aligned}$$

$$\begin{aligned}
 \text{Monthly Instal.} &= \$17,760 \div 48 \\
 &= \$370.00
 \end{aligned}$$

$$32) \text{ Mean} = 63$$

$$\text{Total} = 63 \times 4 \text{ innings} = 252 \text{ runs}$$

$$\text{New Mean} = 63 + 3 = 66$$

$$\text{New Total} = 66 \times 5 \text{ innings} = 330 \text{ runs}$$

$$6^{\text{th}} \text{ Inning} = 0 \text{ runs}$$

$$\text{New Mean} = 330 \div 6 \text{ innings} = 55 \text{ runs}$$

33) Divide \$18.50 by 5 to get \$3.70 as the Cost of 1 orange at Vendor A. Divide \$33 By 12 to get \$2.75 as the cost of 1 orange At Vendor B. When you compare answers, Vendor B has the better offer.

$$34) \text{ Suresh's Time} = 16.9 - 0.3 = 16.6 \text{ seconds}$$

$$\text{Suresh} - 16.6 \text{ sec} - 1^{\text{st}}$$

$$\text{Uric} - 16.8 \text{ sec} - 2^{\text{nd}}$$

$$\text{Allan} - 16.9 \text{ sec} - 3^{\text{rd}}$$

$$\text{Ryan} - 17.2 \text{ sec} - 4^{\text{th}}$$

$$\text{Richard} - 18.6 \text{ sec} - 5^{\text{th}}$$

The times are arranged from the shortest To the longest. The runner with the shortest time completed the race the fastest. That runner would place first. Suresh therefore came first.

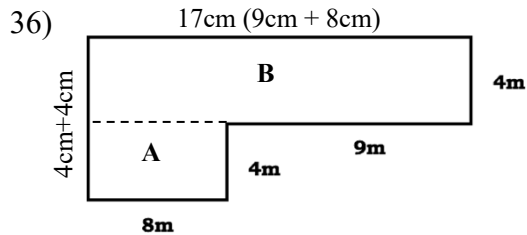
35) One Cube has 12 edges needed to make The frame.

$$\text{Larger Cube} = 12 \text{ edges} \times 8\text{cm} = 96\text{cm}$$

$$156\text{cm} - 96\text{cm} = 60\text{cm}$$

$$\begin{aligned}
 \text{Smaller Cube} &= 60\text{cm} \div 12 \text{ edges} \\
 &= 5\text{cm length of edge}
 \end{aligned}$$

TEST 9



$$\begin{aligned}\text{Area of A} &= 800\text{cm} \times 400\text{cm} \\ &= 320,000\text{cm}^2\end{aligned}$$

$$\begin{aligned}\text{Area of B} &= 1700 \times 400 \\ &= 680,000\text{m}^2\end{aligned}$$

$$\text{Total Area of floor} = 1,000,000\text{m}^2$$

$$\text{Area of tile} = 20 \times 20 = 400\text{cm}^2$$

$$\text{No. of tiles needed} = \frac{1,000,000}{400} = 2,500$$

$$\text{Cost of Tiles} = 2,500 \times \$9 = \$22,500$$

$$\begin{aligned}\text{Total Cost} &= \$22,500 \text{ Tiles} \\ &\quad \underline{\$ 2,000} + \text{Labour} \\ &\quad \underline{\underline{\$24,500}}\end{aligned}$$

- 37) 37 Poles = 36 Spaces on a straight line
Space between Poles = 5m
 \therefore Distance of road = 36 space \times 5m
= 180m

- 38) 15 horses = 30 days food
 \therefore 1 horse = 30 \times 15 = 450 days food
6 horses = 450 \div 6 = 75 days of food.

- 39) Mean needed = 90
Total Score needed = 90 \times 4 Test
= 360 marks
Marks made = 85 + 90 + 88 = 263 marks
Mark needed for Science = 360 - 263
= 97 marks

- 40) -One has no 90° angles
-One has 4- 90° angles

- One has 1 line of symmetry
-One has 4 lines of symmetry

- One has 1 pair of parallel sides
-One has 2 pairs of parallel sides

- One has 2 equal sides
-One has 4 equal sides

SECTION 3

- 41) 15 Litres = 15 \times 1,000 = 15,000 cm^3
 \therefore Height = $\frac{15,000}{1,500} / \text{Volume} \div (\text{L} \times \text{W})$
= 10cm

$$\text{Height of water} = \frac{3}{5} \times \frac{10}{1} = 6\text{cm}$$

$$\frac{3}{5} \text{ filled} = \frac{3}{5} \times \frac{15,000}{1} = 9,000\text{cm}^3$$

$$\begin{aligned}\therefore \text{Water needed to fill container} \\ &= 15,000 - 9000 = 6,000\text{cm}^3\end{aligned}$$

- 42) Mangoes in bag = 600

$$\begin{aligned}\text{Tom} &= 30\% = \frac{30}{100} = \frac{3}{10} \times \frac{600}{1} \\ &= 180 \text{ mangoes}\end{aligned}$$

$$\text{Mangoes Left} = 600 - 180 = 420$$

$$\begin{aligned}\text{Jack received} &= 0.4 = \frac{4}{10} \times \frac{420}{1} \\ &= 168 \text{ mangoes}\end{aligned}$$

$$\text{Mangoes Left} = 420 - 168 = 252$$

$$\text{Heaps Made} = 252 \div 6 = 42$$

$$\text{Cost per heap} = \$15$$

$$\therefore \text{Money Made} = \$15 \times 42 = \$630$$

TEST 9

- 43) No. of Rect. Faces = 3
No. of Triangular Faces = 2
No. of Edges = 9
No. of Vertices = 6

3 edges measure 60cm

- 44) The pattern follows that each new line
Added has 1 more marble than the last
Line of the previous pattern.

4 th	5 th	6 th	7 th	8 th
15	15+6	21+7	28+8	36+9
	21	28	36	45

- 45) Wed: 50 Tables Fri. 40 Tables
 × 6 240 ÷ 6
 300 Chairs 240 Chairs

Mean No. of Tables

$$= 10 + 25 + 50 + 30 + 40 = 155 \div 5 = 31$$

Mean No. of Chairs

$$= 60 + 150 + 300 + 180 + 240 = 930 \div 5 = 186$$

$$\text{Difference} = 186 - 31 = 155$$