

TEST 4

SECTION 1

1) $69, \underline{5}372 = 5,000$

2) $12, 14, 16, 18, 20, 22, 24 = 7$ even numbers

3) $\frac{81}{5} = 16\frac{1}{5}$

4)
$$\begin{array}{r} 1217.4510 \\ - 19.28 \\ \hline 8.22 \end{array}$$

5) $88 \div 4 = 28 - 6 = 22$

6) $9 \times 9 = 81$

$$\begin{array}{l} \square + 9 = 31 \\ \square = 31 - 9 \\ \square = 22 \end{array}$$

7) $\frac{7}{8} = 49$

$\therefore \text{All} = (49 \div 7) \times 8 = 56$

Or $\frac{8}{7} \times \frac{49}{1} = 56$

8)
$$\begin{array}{r} 495 \\ - 161 \\ \hline 334 \end{array}$$

9)
$$\begin{array}{r} \$82.30 \\ - \$62.05 \\ \hline \$20.25 \end{array}$$

\$20.00

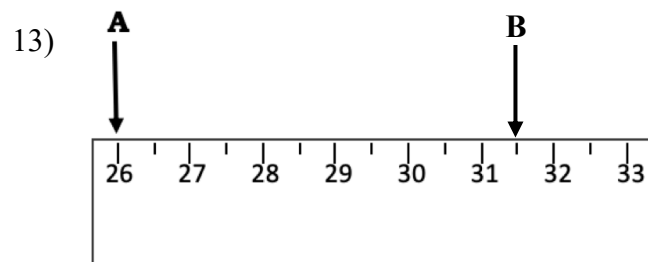
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TEST 4

$$\begin{aligned} 10) \quad 5N + 31 &= 76 \\ 5N &= 76 - 31 \\ 5N &= 45 \\ 5 \times N &= 45 \\ N &= 45 \div 5 \\ N &= 9 \end{aligned}$$

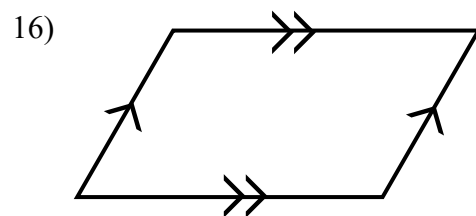
$$11) \quad 750\text{g} \div 3 = 250\text{g}$$

$$\begin{array}{r} 12) \quad 12:00 \\ + 4:40 \\ \hline 16:40 \end{array}$$



14) Triangular Prism

15) Cylinder



$$17) \quad \text{Height} = \frac{\text{Volume}}{L \times W} = \frac{800}{40} = 20\text{cm}$$

TEST 4

$$18) 120 \div 20 = 6$$

$$\text{🏠} = 6 \text{ houses}$$

$$19) \text{Mode} = \text{Chocolate}$$

$$\begin{array}{r} 20) 152 \\ 136 \\ 166 \\ + 154 \\ \hline 608 \end{array} \div 4 = 152 \text{cm}$$

$$\text{Mean} = 127$$

SECTION 2

$$\begin{aligned} 21) 4 \frac{3}{5} \div 2 \frac{3}{10} \\ = \frac{23}{5} \times \frac{10}{23} = \frac{2}{1} = 2 \end{aligned}$$

$$\begin{array}{r} 22) 475 \\ - 285 \\ \hline 190 \end{array}$$

$$\therefore \frac{190}{475} \times \frac{100}{1} = 40\% \text{ not sold}$$

$$23) \text{Friend} = 0.3 = \frac{3}{10}$$

$$\text{Sister} = \frac{2}{5}$$

$$\therefore \frac{3}{10} + \frac{2}{5} = \frac{3}{10} + \frac{4}{10} = \frac{7}{10} \text{ given away}$$

$$\frac{10}{10} - \frac{7}{10} = \frac{3}{10} \text{ kept}$$

$$24) N \times 15 = ? + 10 = 70$$

$$\therefore 70 - 10 = 60$$

$$60 \div 15 = 4$$

$$N = 4$$

TEST 4

$$\begin{aligned} 25) \text{ 1st Boy} &= 20 + 10 + \textcircled{20} = 50 \\ \text{2nd Boy} &= 10 + \textcircled{20} = 30 \\ \text{3rd Boy} &= \textcircled{20} = 20 \end{aligned}$$

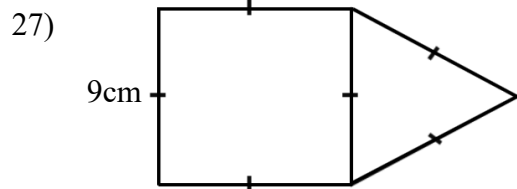
$$\begin{array}{r} 100 \\ - 40 \\ \hline 60 \div 3 = \textcircled{20} \end{array}$$

$$\text{1st Boy} = 50$$

$$26) 340 \div 60 = 5 \text{ Shelves } (60 \times 5 = 300 \text{ Tins})$$

40 Tins left

5 Complete Shelves



$$\begin{aligned} \text{Perimeter of Shape} &= 5 \text{ sides} \times 9\text{cm} \\ &= 45\text{cm} \end{aligned}$$

$$28) 3 - 90^\circ \text{ angles}$$

$$29) \text{ Purple} - 16$$
$$\text{Pink} - 11$$

$$30) \text{ Mean} = 70$$

$$\text{Total of 6 Test} = 70 \times 6 = 420 \text{ marks}$$

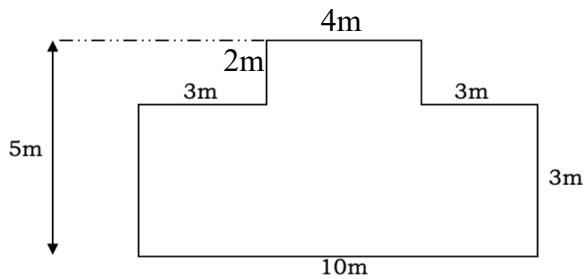
$$7^{\text{th}} \text{ Test} = 70 \text{ marks}$$

$$\text{New Total} = 420 + 70 = 490$$

$$\text{New Mean} = 490 \div 7 = 70$$

TEST 4

31)



$$\begin{aligned}\text{Area of A} &= 400 \times 200 = 80,000\text{cm}^2 \\ \text{Area of B} &= 1,000 \times 300 = 300,000\text{cm}^2 \\ \text{Total Area} &= 380,000\text{cm}^2\end{aligned}$$

$$\begin{aligned}\text{Area of Tile} &= 10 \times 10 = 100\text{cm}^2 \\ \text{No. of Tiles} &= \frac{\text{Area of Shape}}{\text{Area of Tile}} = \frac{380,00}{100} \\ &= 3,800 \text{ Tiles}\end{aligned}$$

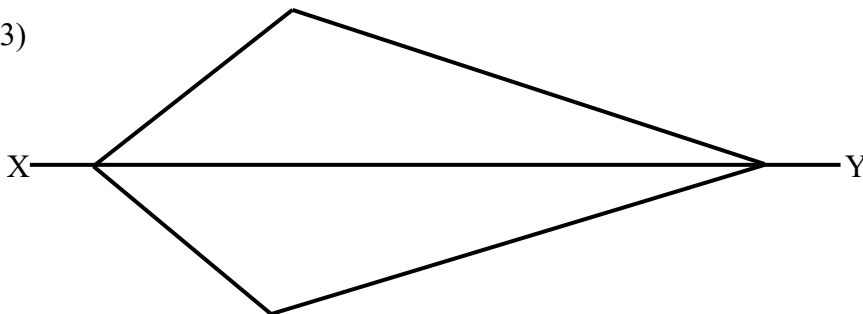
32) Perimeter of Square Price of Land = $30\text{m} \times 4$
 $= 120\text{m}$

Space between Poles = 3m

\therefore Number of Poles = $120 \div 3 = 40$ Poles

No, Anna is not correct. When poles are placed around a shape we do not need to add an Extra pole since we will meet the 1st pole placed when we have reached the last space.

33)



Kite

TEST 4

34) S.I. = $P \times R \times T$

$$= \frac{\$80,000 \times 10 \times 5}{100}$$
$$= \frac{4,000,000}{100} = \$40,000$$

Total to repay = $\$80,000 + \$40,000 = \$120,000$

Monthly Installments = $\frac{\$120,000}{60} = \$2,000$

35) Nathan used the method of dividing the \$40 by 2 to calculate $\frac{1}{5}$ of the boy's allowance. He

Then multiplied his answer by 5 because $\frac{5}{5}$ represents the boy's full allowance. This was done by finding the reciprocal of the fraction $\frac{2}{5}$ which did the two steps of dividing by 2 and multiplying by 5.

36) (i) Parallelogram

(ii) 2 pairs of parallel sides.

4 sides equal

(iii) Kite

37) 200 Bags to Pack

1 Bag = 3 sandwiches + 2 cookies = 5 items per bag

150 sandwiches + 100 cookies = 250 items \div 5 items

= 50 bags packed

200 bags – 50 bags = 150 bags to be packed

$\therefore \frac{150}{200} \times \frac{100}{1} = 75\%$ of bags left to be packed

38) Bus = 10

Taxi = 25 +

Walk = 15

Total = 50

100 students – 50 students = 50 students

Private Car = 50 students

Mode of Transportation = Private Car

39) Area of Rectangle = $L \times W$

= 9×4

= 36cm^2

TEST 4

$$\text{Perimeter of Square} = 36$$

$$1 \text{ side} = 36 \div 4 = 9\text{cm}$$

$$\text{Area of Square} = 9 \times 9 = 81\text{cm}^2$$

$$\text{Difference in Area of Square and Rectangle} = 81\text{cm}^2 - 36\text{cm}^2 = 45\text{cm}^2$$

$$40) \text{ Car A} = 4 \text{ hours } 25 \text{ mins}$$

$$\text{Car C} = 4 \text{ hours } 25 \text{ mins} + 20 \text{ mins} = 4 \text{ hours } 45 \text{ mins}$$

$$\text{Car D} = 4 \text{ hours } 25 \text{ mins} - 12 \text{ mins} = 4 \text{ hours } 13 \text{ mins}$$

$$\text{Car B} = 4 \text{ hours } 45 \text{ mins} - 15 \text{ mins} = 4 \text{ hours } 30 \text{ mins}$$

First Place: Car D

Second Place: Car A

Third Place: Car B

Fourth Place: Car C

SECTION 3

$$41) \text{ Tim} = x$$

$$\text{Jack} = 2x$$

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

$$7x = \$700$$

$$x = \$700 \div 7 = \$100$$

$$\text{Tim} = x = \$100$$

$$\text{Jack} = 2x = \$100 \times 2 = \$200$$

$$\text{Brain} = 4x = \$100 \times 4 = \$400$$

$$42) \text{ First Discount} = 20\%$$

$$\frac{20}{100} \times \$2000 = \$400 \text{ off}$$

$$\text{New Price} = \$2000 - \$400 = \$1,600$$

$$\text{Additional Discount} = 10\%$$

$$= \frac{10}{100} \times 1,600 = \$160 \text{ off}$$

$$\text{Sale Price} = \$1,600 - \$160 = \$1,440$$

$$\text{Plus } 12\frac{1}{2}\% \text{ V.A.T.} = \frac{1}{8} \times \frac{\$1,440}{1} = \$180$$

$$\begin{aligned} \text{Customer will pay} &= \$1,440 + \$180 \\ &= \$1,620.00 \end{aligned}$$

TEST 4

$$\begin{aligned}43) \text{ Perimeter of Rectangle} &= (L + W) \times 2 \\ &= (20 + 16) \times 2 \\ &= 36 \times 2 = 72\text{cm}^2\end{aligned}$$

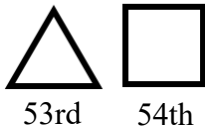
$$\text{Perimeter of Square} = 72 \div 2 = 36\text{cm} \quad (1 \text{ side} = 36 \div 4 = 9\text{cm})$$

$$\begin{aligned}\text{Area of Rectangle} &= L \times W \\ &= 20\text{cm} \times 16\text{cm} = 320\text{cm}^2\end{aligned}$$

$$\begin{aligned}\text{Area of Square} &= S \times S \\ &= 9 \times 9 = 81\text{cm}^2\end{aligned}$$

$$\text{Difference in both shapes} = 320\text{cm}^2 - 81\text{cm}^2 = 239\text{cm}^2$$

44) $54 \div 4 = 13$ complete patterns, then first 2 shapes which will be



45) Mean = 66

$$\therefore \text{Total} = 66 \times 5 = 330 \text{ marks}$$

$$330 - (80 + 55 + 75) = 330 - 120 = 120$$

$$\begin{aligned}\text{John and Allan have the same mark} &= 120 \div 2 \\ &= 60 \text{ marks}\end{aligned}$$