

Ans 1

$$\begin{aligned} \text{Length of string} &= 120 \text{ cm} \\ \text{Sides of square} &= 4 \\ \text{Length of each side of square} &= \frac{120 \text{ cm}}{4} \\ &= 30 \text{ cm} \end{aligned}$$

Ans 2

$$\begin{aligned} \text{Length} &= 6 \text{ m} \\ \text{Breadth} &= 4.5 \text{ m} \end{aligned}$$

$$\begin{aligned} \text{Area} &= l \times b \\ &= 6 \times 4.5 \text{ m} \\ &= 27 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} \text{Cost of per meter} &= \text{Rs } 45 \\ \text{Cost of } 27 \text{ m} &= \text{Rs } 45 \times 27 \\ &= \text{Rs } 1215 \end{aligned}$$

Ans 3

Length sides of triangle = 3

Side length of 1 side = 11 cm

length of whole wire =  $3 \times 11$  cm  
 $= 33$  cm

Circumference =  $2\pi r$

$$33 \text{ cm} = 2 \times 22 \times r$$

7

$$33 \text{ cm} = \frac{22}{7} \times r$$

2

7

$$r = \frac{33 \times 7}{2 \times 22}$$

2

22

$$r = \frac{231}{44}$$

44

$$r = 5.25 \text{ cm}$$

$$\text{Area} = \pi r^2$$

$$= 22 \times \frac{5.25^2}{7}$$

7

$$= 22 \times 5.25 \times 5.25$$

7

$$= 606.375 \text{ cm}^2$$

Ans 5 Radius = 63 cm

$$\begin{aligned}
 \text{Circumference} &= 2\pi r \\
 &= 2 \times \frac{22}{7} \times 63 \\
 &= 396 \text{ cm} \\
 &= \frac{396}{100} \text{ m} \\
 &= 3.96 \text{ m}
 \end{aligned}$$

Distance wheel covers in 1 turn = 3.96 m

Distance to cover = 1980 m

$$\begin{aligned}
 \text{Turns required to complete it} &= \frac{1980 \text{ m}}{3.96 \text{ m}} \\
 &= 500
 \end{aligned}$$

Ans 6 Area covered by 1 tile = 12 cm x 10 cm

$$\begin{aligned}
 &= 120 \text{ cm} \\
 &= 1.20 \text{ m}^2
 \end{aligned}$$

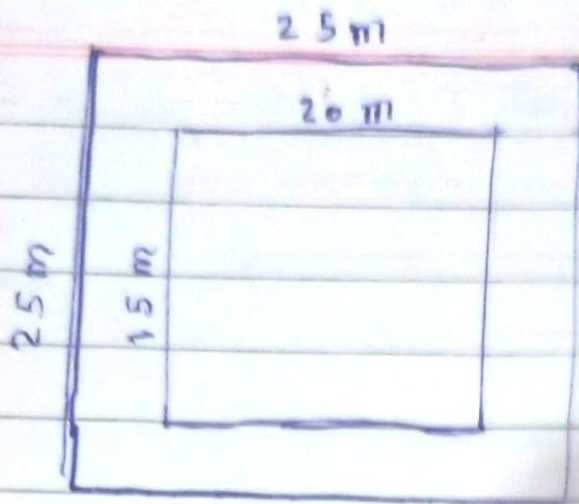
Area of lane = 240 m x 12 m

$$= 2880 \text{ m}^2$$

Tiles required =  $\frac{2880 \text{ m}^2}{1.2 \text{ m}^2}$

$$= 2400 \text{ tiles}$$

Ans 7



$$\begin{aligned}\text{Area of house} &= 15\text{ m} \times 20\text{ m} \\ &= 300\text{ m}^2\end{aligned}$$

$$\begin{aligned}\text{Area of plot} &= 25\text{ m} \times 25\text{ m} \\ &= 625\text{ m}^2\end{aligned}$$

$$\begin{aligned}\text{Area of garden} &= 625\text{ m}^2 - 300\text{ m}^2 \\ &= 325\text{ m}^2\end{aligned}$$

Ans 9

$$\text{Area of trapezium} = \frac{1}{2} \times (\text{sum of parallel sides}) \times h$$

$$180\text{ cm}^2 = \frac{1}{2} \times ((x+6) + x) \times 9\text{ cm}$$

$$180\text{ cm}^2 \div \frac{1}{2} = \frac{((x+6) + x) \times 9\text{ cm}}{2}$$

$$180\text{ cm}^2 \times 2 = ((x+6) + x) \times 9\text{ cm}$$

$$360\text{ cm}^2 = ((x+6) + x) \times 9\text{ cm}$$

$$360\text{ cm}^2 = ((x+6) + x)$$

$$9\text{ cm}$$

$$40 \text{ cm} = ((x+6) + x)$$

$$40 \text{ cm} = 2x + 6$$

$$2x = 40 \text{ cm} - 6$$

$$2x = 34 \text{ cm}$$

$$x = \frac{34 \text{ cm}}{2}$$

$$2$$

$$x = 17 \text{ cm}$$

$$x = 17 \text{ cm}$$

$$x + b = 23 \text{ cm}$$

Ans 10

Length of rectangle = 20 cm

Breadth of rectangle = 7 cm

$$\begin{aligned} \text{Perimeter of rectangle} &= 2 \times (l + b) \\ &= 2 \times (20 + 7) \text{ cm} \\ &= 2 \times 27 \text{ cm} \\ &= 54 \text{ cm} \end{aligned}$$

$$\begin{aligned} \text{Area of rectangle} &= l \times b \\ &= 20 \times 7 \\ &= 140 \text{ cm} \end{aligned}$$