Exercise 1G

Q5

Answer :

Cost of $3\frac{2}{5}$ m cloth $= 3\frac{2}{5} \times 36\frac{3}{4}$

$$= \left(3+\frac{2}{5}\right) \times \left(36+\frac{3}{4}\right)$$
$$= \frac{17}{5} \times \frac{147}{4}$$
$$= \frac{17\times147}{5\times4}$$
$$= \frac{2499}{20}$$
$$= \text{Rs } 124\frac{19}{20}$$

Therefore, the cost of $3\frac{2}{5}$ m cloth is Rs $124\frac{19}{20}$.

Q6

Answer :

Distance covered by the car in $7\frac{1}{2}$ hours $= 7\frac{1}{2} \times 40\frac{2}{5}$ [Distance = Speed × Time]

$$= \left(7+\frac{1}{2}\right) \times \left(40+\frac{2}{5}\right)$$
$$= \frac{15}{2} \times \frac{202}{5}$$
$$= \frac{15\times202}{10}$$
$$= \frac{3030}{10}$$
$$= 303 \text{ km}$$

Therefore, distance covered by the car is 303 km.

Q7

Answer :

Area of the rectangular park = Length of the park × Breadth of the park (∵ Area of rectangle = Length × Breadth)

$$= 36\frac{3}{5} \times 16\frac{2}{3}$$
$$= \left(36+\frac{3}{5}\right) \times \left(16+\frac{2}{3}\right)$$
$$= \frac{183}{5} \times \frac{50}{3}$$
$$= \frac{183\times50}{5\times3}$$
$$= \frac{9150}{15}$$
$$= 610 \text{ m}^2$$

Therefore, the area of the rectangular park is 610 m^2.

Q9

Answer :

Area of the square plot = Side × Side = $(\text{Side})^2 = a^2$ (Because the area of the square is a^2, where a is the side of the square)

$$= 8\frac{1}{2} \times 8\frac{1}{2}$$
$$= \left(8 + \frac{1}{2}\right) \times \left(8 + \frac{1}{2}\right)$$
$$= \frac{17}{2} \times \frac{17}{2}$$
$$= \frac{17 \times 17}{2 \times 2}$$
$$= \frac{289}{4}$$
$$= 72\frac{1}{4}\ \text{m}^2$$

Therefore, the area of the square plot is $72\frac{1}{4}\ \text{m}^2$.

Q10

Answer :

Distance covered by the aeroplane in $4\frac{1}{6}$ hours = $4\frac{1}{6} \times 1020$

$$= \left(4 + \frac{1}{6}\right) \times 1020$$
$$= \frac{25}{6} \times 1020$$
$$= \frac{25}{6} \times \frac{1020}{1}$$
$$= \frac{25 \times 1020}{6 \times 1}$$
$$= \frac{25500}{6}$$
$$= 4250\ \text{km}$$

Therefore, the distance covered by the aeroplane is $4250\ \text{km}$.

********** END **********