

Fractions Ex 2.3 Q4

Answer:

$$\frac{3}{10} \div \frac{10}{3} = \frac{3}{10} \times \frac{3}{10} \Leftrightarrow \frac{3 \times 3}{10 \times 10}$$

$$\Rightarrow \frac{9}{100}$$

(ii)
$$4\frac{3}{5} \div \frac{4}{5} = \frac{(4 \times 5) + 3}{5} \div \frac{4}{5}$$

$$\Rightarrow 4\frac{3}{5} \div \frac{4}{5} = \frac{23}{5} \div \frac{4}{5} \Leftrightarrow \frac{23}{5} \times \frac{5}{4}$$

$$\Rightarrow \frac{23}{4} = 5\frac{3}{4}$$

(iii)
$$5\frac{4}{7} \div 1\frac{3}{10} = \frac{(5\times7)+4}{7} \div \frac{(1\times10)+3}{10}$$

$$\Rightarrow 5\frac{4}{7} \div 1\frac{3}{10} = \frac{39}{7} \div \frac{13}{10} \Leftrightarrow \frac{\cancel{20}^{3}}{7} \times \frac{10}{\cancel{10}}$$

$$\Rightarrow \frac{30}{7} = 4\frac{2}{7}$$

$$4 \div 2\frac{2}{5} = \frac{4}{1} \div \frac{(2 \times 5) + 2}{5} \Leftrightarrow \frac{\cancel{4}}{1} \times \frac{5}{\cancel{1}}$$

$$\Rightarrow \frac{5}{3} = 1\frac{2}{3}$$

Fractions Ex 2.3 Q5

Answer:

$$12 \frac{1}{2} \,\mathrm{m} = \frac{(12 \times 2) + 1}{2} \,\mathrm{m}$$
$$= \frac{25}{2} \,\mathrm{m}$$

Length of one piece =
$$\frac{\text{Length of wire}}{10} = \frac{25}{2} \times \frac{1}{10} = \frac{25}{20}$$

Length of one piece =
$$\frac{28^4}{20^4} = \frac{5}{4}$$
 m

Fractions Ex 2.3 Q6

Answer:

Area of rectangle = Length of rectangle \times Width of rectangle $65\,\frac{1}{3}=12\,\frac{1}{4}\times$ Width of the rectangle

$$\frac{(65\times3)+1}{3} = \left[\frac{(12\times4)+1}{4}\right] \times \text{Width of the rectangle}$$

$$\frac{196}{3} = \frac{49}{4} \times \text{Width of the rectangle}$$

Width of the rectangle
$$=\frac{106^4}{3} \times \frac{4}{\cancel{40}} = \frac{16}{3}$$
 m

Fractions Ex 2.3 Q7

Answer:

Let the required number be x.

According to the question:

$$6 \frac{2}{9} \times x = 4 \frac{4}{9}$$

$$\frac{(6 \times 9) + 2}{9} \times x = \frac{(4 \times 9) + 4}{9}$$

$$\frac{56}{9} \times x = \frac{40}{9}$$

$$x = \frac{40}{9} \times \frac{\cancel{9}}{56}$$

$$x = \frac{40}{56} = \frac{5}{7}$$

Fractions Ex 2.3 Q8

Answer:

Let the required number be x.

According to the question:

$$6\frac{\frac{2}{3} \times x}{3} \times x = 25\frac{5}{6}$$

$$\frac{(6 \times 3) + 2}{3} \times x = \frac{(25 \times 6) + 5}{6}$$

$$\frac{20}{3} \times x = \frac{155}{6}$$

$$x = \frac{3}{20} \times \frac{155}{6} = \frac{\cancel{2} \times \cancel{155}^{31}}{\cancel{20}^{4} \times \cancel{6}^{2}} = \frac{31}{8}$$

$$= 3\frac{7}{8}$$

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