Chapter – 7

Decimal Fractions

Lecture sheet – 9

Word Problems

1. Iron bar is 0.8 m in length but its weight is 12 kg. Find the weight per metre of iron bar.

Solution:

Weight of 0.8 m of the iron bar = 12 kg

Weight of 1 m of the iron bar = (12 ÷ 0.8) kg

$$= \frac{12}{0.8} kg$$
$$= \frac{12 \times 10}{0.8 \times 10} kg$$
$$= \frac{120}{8} kg$$
$$= 15 \text{ kg}$$

Ans: 15 kg

2. There is 1.6 litres of paint in a pot and it weight 2.4 kg. Find the weight per litre of the paint.

Solution:

Weight of 1.6L of paint = 2.4 kg

Weight of 1 L of paint = (2.4 ÷ 1.6) kg

$$= (24.0 ÷ 16) \text{ Kg}$$
$$= 1.5 \text{ kg}$$

Ans: 1.5 Kg

Rough
```
         1.5
16 ) 24.0
     16
       8 0
       8 0
         0
```

3. There is a rectangular shape land whose area is $29.4m^2$. When its width is 8.4 metres, find the length of this land.

Solution:

Given that,

Area of land = 29.4 sq. m

And width = 8.4 m

We know,

Length of the land = Area ÷ Width

= (29.4 ÷ 8.4) m

= (294.0 ÷ 84) m

= 3.5 m

Ans: 3.5 m.

```
        Rough
         3.5
  84 ) 294.0
       252
       420
       420
         0
```

Exercise: (Do yourself)

1. A car has travelled 114.5 km in 2.5 hours. How many km did it travel in one hour?

2. A rectangular land has an area of $729m^2$. When its width is 22.5 m, find the length of this land.

3. A 3.25 metre long iron bar weighs 15.6 kg. Find the weight per metre of this iron bar.