

Exercise - 8.2

Solve these word problems.

1. Height of Reeta = $1\text{ m } 25\text{ cm} = 125\text{ cm}$
Height of her sister is taller than her by 37 cm

$$\begin{aligned}\text{Required height of Reeta's sister} &= 1\text{ m } 25\text{ cm} + 37\text{ cm} \\ &= 125\text{ cm} + 37\text{ cm} \\ &= 162\text{ cm} \\ &= 1\text{ m } 62\text{ cm}\end{aligned}$$

$$\begin{array}{r} 125\text{ cm} \\ + 37\text{ cm} \\ \hline 162\text{ cm} \end{array}$$

Ans. The height of Reeta's sister is $1\text{ m } 62\text{ cm}$.

2. Length of a rope = $5\text{ m } 75\text{ cm}$

$$\text{Length of one piece of it} = 2.25\text{ m} = 2\text{ m } 25\text{ cm}$$

$$\begin{aligned}\text{Required length of other piece} &= 5\text{ m } 75\text{ cm} - 2\text{ m } 25\text{ cm} \\ &= 3\text{ m } 50\text{ cm} \\ &= 3.5\text{ m}\end{aligned}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 5 \quad 75 \\ - 2 \quad 25 \\ \hline 3 \text{ m } 50 \text{ cm} \end{array}$$

Ans. The required length of other piece of rope is $3\text{ m } 50\text{ cm}$ or 3.5 m .

- 3) Distance covered by Gopal in his each step = 50 cm
Distance Gopal has to cover = $\frac{1}{2}\text{ km} = 500\text{ m} = (500 \times 100)\text{ cm} = 50000\text{ cm}$

$$\text{Number of steps Gopal has to cover } \frac{1}{2}\text{ km} = \frac{50000\text{ cm}}{50\text{ cm}}$$

Ans. Gopal has to take 1000 steps to cover $\frac{1}{2}\text{ km}$.

$$\begin{array}{r} 50000 \\ \overline{) 50} \\ 50 \\ \hline 00 \\ \overline{) 00} \\ 00 \\ \hline 00 \\ \overline{) 00} \\ 00 \\ \hline 00 \end{array}$$

4. Distance Amrita had to travel = 20 km

Distance had covered = 17 km 50 m

Distance remained to be covered = 20 km - 17 km 50 m

= 2 km 950 m

So 2 km 950 m = 2000 m + 950 m = 2950 m = 2.95 km

Ans. 2.95 km remained to be covered.

km	m
20	000
- 17	050
2	950

CHECKPOINT!**Fill in the blanks.**

1. 2 kg = 2000 g

2. 5 g = 5000 mg

3. 4000 mg = 4 g

4. 32 kg = 32000 g

5. 1000 g = 1 kg

6. 8000 g = 8 kg

7. 5000 mg = 5 g

8. 19 kg = 19000 g

**HOTS question**

Tick (✓) the correct answer. To change mg into kg, you need to divide by

100 1000 10000 100000 1000000