

## Exercise 2.5

### Question 1:

Which is greater:

(i) 0.5 or 0.05

(ii) 0.7 or 0.5

(iii) 7 or 0.7

(iv) 1.37 or 1.49

(v) 2.03 or 2.30

(vi) 0.8 or 0.88

### Answer 1:

(i)  $0.5 > 0.05$

(ii)  $0.7 > 0.5$

(iii)  $7 > 0.7$

(iv)  $1.37 < 1.49$

(v)  $2.03 < 2.30$

(vi)  $0.8 < 0.88$

### Question 2:

Express as rupees using decimals:

(i) 7 paise

(ii) 7 rupees 7 paise

(iii) 77 rupees 77 paise

(iv) 50 paise

(v) 235 paise

### Answer 2:

$\therefore 100 \text{ paise} = ₹1$

$\therefore 1 \text{ paise} = ₹ \frac{1}{100}$

(i)  $7 \text{ paise} = ₹ \frac{7}{100} = ₹ 0.07$

(ii)  $7 \text{ rupees } 7 \text{ paise} = ₹ 7 + ₹ \frac{7}{100} = ₹ 7 + ₹ 0.07 = ₹ 7.07$

(iii)  $77 \text{ rupees } 77 \text{ paise} = ₹ 77 + ₹ \frac{77}{100} = ₹ 77 + ₹ 0.77 = ₹ 77.77$

(iv)  $50 \text{ paise} = ₹ \frac{50}{100} = ₹ 0.50$

(v)  $235 \text{ paise} = ₹ \frac{235}{100} = ₹ 2.35$

### Question 3:

(i) Express 5 cm in metre and kilometer.

(ii) Express 35 mm in cm, m and km.

### Answer 3:

(i) Express 5 cm in meter and kilometer.

$\therefore 100 \text{ cm} = 1 \text{ meter}$

$\therefore 1 \text{ cm} = \frac{1}{100} \text{ meter}$

$\Rightarrow 5 \text{ cm} = \frac{5}{100} = 0.05 \text{ meter.}$

Now,

$\therefore 1000 \text{ meters} = 1 \text{ kilometers}$

$\therefore 1 \text{ meter} = \frac{1}{1000} \text{ kilometer}$

$\Rightarrow 0.05 \text{ meter} = \frac{0.05}{1000} = 0.00005 \text{ kilometer}$

(ii) Express 35 mm in cm, m and km.

$$\therefore 10 \text{ mm} = 1 \text{ cm}$$

$$\therefore 1 \text{ mm} = \frac{1}{10} \text{ cm}$$

$$\Rightarrow 35 \text{ mm} = \frac{35}{10} = 3.5 \text{ cm}$$

Now,  $\therefore 100 \text{ cm} = 1 \text{ meter}$

$$\therefore 1 \text{ cm} = \frac{1}{100} \text{ meter}$$

$$\Rightarrow 3.5 \text{ cm} = \frac{3.5}{100} = 0.035 \text{ meter}$$

Again,

$$\therefore 1000 \text{ meters} = 1 \text{ kilometers}$$

$$\therefore 1 \text{ meter} = \frac{1}{1000} \text{ kilometer}$$

$$\Rightarrow 0.035 \text{ meter} = \frac{0.035}{1000} = 0.000035 \text{ kilometer}$$

#### Question 4:

Express in kg:

(i) 200 g

(ii) 3470 g

(iii) 4 kg 8 g

#### Answer 4:

Let us consider,

$$1000 \text{ g} = 1 \text{ kg}$$

$$\Rightarrow 1 \text{ g} = \frac{1}{1000} \text{ kg}$$

$$(i) \quad 200 \text{ g} = \left(200 \times \frac{1}{1000}\right) \text{ kg} = 0.2 \text{ kg}$$

$$(ii) \quad 3470 \text{ g} = \left(3470 \times \frac{1}{1000}\right) \text{ kg} = 3.470 \text{ kg}$$

$$(iii) \quad 4 \text{ kg } 8 \text{ g} = 4 \text{ kg} + \left(8 \times \frac{1}{1000}\right) \text{ kg} = 4 \text{ kg} + 0.008 \text{ kg} = 4.008 \text{ kg}$$

#### Question 5:

Write the following decimal numbers in the expanded form:

(i) 20.03

(ii) 2.03

(iii) 200.03

(iv) 2.034

#### Answer 5:

$$(i) \quad 20.03 = 2 \times 10 + 0 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100}$$

$$(ii) \quad 2.03 = 2 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100}$$

$$(iii) \quad 200.03 = 2 \times 100 + 0 \times 10 + 0 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100}$$

$$(iv) \quad 2.034 = 2 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100} + 4 \times \frac{1}{1000}$$

### Question 6:

Write the place value of 2 in the following decimal numbers:

(i) 2.56

(ii) 21.37

(iii) 10.25

(iv) 9.42

(v) 63.352

### Answer 6:

(i) Place value of 2 in 2.56 =  $2 \times 1 = 2$  ones

(ii) Place value of 2 in 21.37 =  $2 \times 10 = 2$  tens

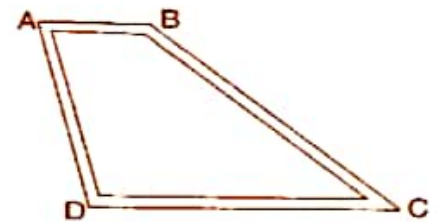
(iii) Place value of 2 in 10.25 =  $2 \times \frac{1}{10} = 2$  tenths

(iv) Place value of 2 in 9.42 =  $2 \times \frac{1}{100} = 2$  hundredth

(v) Place value of 2 in 63.352 =  $2 \times \frac{1}{1000} = 2$  thousandth

### Question 7:

Dinesh went from place A to place B and from there to place C. A is 7.5 km from B and B is 12.7 km from C. Ayub went from place A to place D and from there to place C. D is 9.3 km from A and C is 11.8 km from D. Who travelled more and by how much?



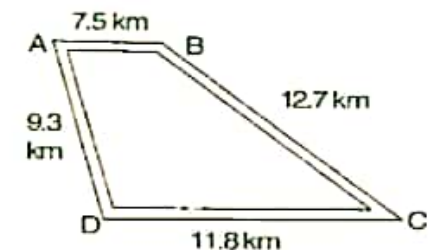
### Answer 7:

Distance travelled by Dinesh when he went from place A to place B = 7.5 km and from place B to C = 12.7 km.

$$\begin{aligned} \text{Total distance covered by Dinesh} &= AB + BC \\ &= 7.5 + 12.7 = 20.2 \text{ km} \end{aligned}$$

$$\begin{aligned} \text{Total distance covered by Ayub} &= AD + DC \\ &= 9.3 + 11.8 = 21.1 \text{ km} \end{aligned}$$

$$\begin{aligned} \text{On comparing the total distance of Ayub and Dinesh,} \\ 21.1 \text{ km} > 20.2 \text{ km} \end{aligned}$$



Therefore, Ayub covered more distance by  $21.1 - 20.2 = 0.9 \text{ km} = 900 \text{ m}$

### Question 8:

Shyam bought 5 kg 300 g apples and 3 kg 250 g mangoes. Sarala bought 4 kg 800 g oranges and 4 kg 150 g bananas. Who bought more fruits?

### Answer 8:

$$\text{Total weight of fruits bought by Shyam} = 5 \text{ kg } 300 \text{ g} + 3 \text{ kg } 250 \text{ g} = 8 \text{ kg } 550 \text{ g}$$

$$\text{Total weight of fruits bought by Sarala} = 4 \text{ kg } 800 \text{ g} + 4 \text{ kg } 150 \text{ g} = 8 \text{ kg } 950 \text{ g}$$

$$\text{On comparing the quantity of fruits, } 8 \text{ kg } 550 \text{ g} < 8 \text{ kg } 950 \text{ g}$$

Therefore, Sarala bought more fruits.

### Question 9:

How much less is 28 km than 42.6 km?

### Answer 9:

We have to find the difference of 42.6 km and 28 km.

$$\text{Difference} = 42.6 - 28.0 = 14.6 \text{ km}$$

Therefore 14.6 km less is 28 km than 42.6 km.