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:

$\because$ 100 paise = ₹1

$\therefore$ 1 paisa = ₹ $\frac{1}{100}$

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

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

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

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

(v) 235 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.

$\because$ 100 cm = 1 meter

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

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

Now,

$\because$ 1000 meters = 1 kilometers

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

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

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

$\because$ 10 mm = 1 cm

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

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

Now, $\because$ 100 cm = 1 meter

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

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

Again,

$\because$ 1000 meters = 1 kilometers

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

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

Question 4:

Express in kg.:

(i) 200 g (ii) 3470 g (iii) 4 kg 8 g

Answer 4:

Let us consider,

1000 g = 1 kg

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

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

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

(iii) 4 kg 8 g = 4 kg + $\left(8\times\frac{1}{1000}\right)$ kg = 4 kg + 0.008 kg = 4.008 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) $20.03 = 2\times10+0\times1+0\times\frac{1}{10}+3\times\frac{1}{100}$

(ii) $2.03 = 2\times1+0\times\frac{1}{10}+3\times\frac{1}{100}$

(iii) $200.03 = 2\times100+0\times10+0\times1+0\times\frac{1}{10}+3\times\frac{1}{100}$

(iv) $2.034 = 2\times1+0\times\frac{1}{10}+3\times\frac{1}{100}+4\times\frac{1}{1000}$

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 x 1 = 2 ones

(ii) Place value of 2 in 21.37 = 2 x 10 = 2 tens

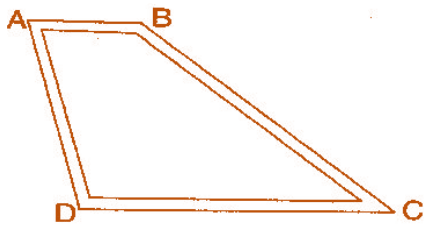
(iii) Place value of 2 in 10.25 = $2 \times \frac{1}{10}$ = 2 tenths

(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

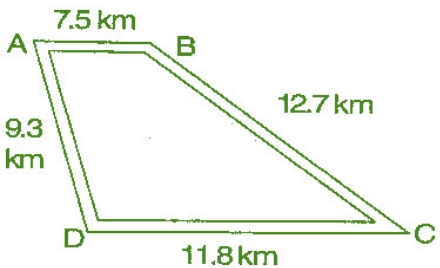
Question 7:

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.



Total distance covered by Dinesh = AB + BC
= 7.5 + 12.7 = 20.2 km

Total distance covered by Ayub = AD + DC
= 9.3 + 11.8 = 21.1 km

On comparing the total distance of Ayub and Dinesh,
21.1 km > 20.2 km

Therefore, Ayub covered more distance by 21.1 – 20.2 = 0.9 km = 900 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:

Total weight of fruits bought by Shyam = 5 kg 300 g + 3 kg 250 g = 8 kg 550 g
Total weight of fruits bought by Sarala = 4 kg 800 g + 4 kg 150 g = 8 kg 950 g

On comparing the quantity of fruits, 8 kg 550 g < 8 kg 950 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.
Difference = 42.6 – 28.0 = 14.6 km
Therefore 14.6 km less is 28 km than 42.6 km.