CLASS NOTES-ANSWERS

EXERCISE 2.5

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:

(i) 0.5 or 0.05

$$\frac{5}{10} \quad \boxed{} \quad \frac{5}{100}$$

$$\frac{5 \times 10}{10 \times 10} \quad \boxed{} \quad \frac{5}{100}$$

$$\frac{50}{100} \quad \boxed{>} \quad \frac{5}{100}$$

0.5 is greater.

(ii) 0.7 or 0.5

$$\frac{7}{10} \quad \boxed{} \quad \frac{5}{10}$$

$$\frac{7}{10} \quad \boxed{>} \quad \frac{5}{10}$$

0.7 is greater.

(iii) 7 or 0.7

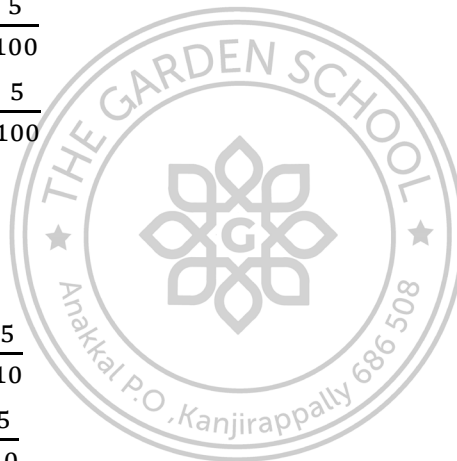$$7 \quad \boxed{} \quad \frac{7}{10}$$

$$7 \quad \boxed{>} \quad \frac{7}{10}$$

7 is greater.

(iv) 1.37 or 1.49

$$\frac{137}{100} \quad \boxed{\phantom{<}} \quad \frac{149}{100}$$

$$\frac{137}{100} \quad \boxed{<} \quad \frac{149}{100}$$

1.49 is greater.

(v) 2.03 or 2.30

$$\frac{203}{100} \boxed{\phantom{<}} \frac{230}{100}$$

$$\frac{203}{100} \boxed{<} \frac{230}{100}$$

2.30 is greater.

(vi) 0.8 or 0.88

$$\frac{8}{10} \boxed{\phantom{<}} \frac{88}{100}$$

$$\frac{8 \times 10}{10 \times 10} \boxed{\phantom{<}} \frac{88}{100}$$

$$\frac{80}{100} \boxed{<} \frac{88}{100}$$

0.88 is greater.

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:

(i) 1 rupee = 100 paise

   1 paise = $\frac{1}{100}$ rupees

   7 paise = $\frac{7}{100}$ rupees = 0.07 rupees

(ii) 7 rupees 7 paise = 7 rupee + $\frac{7}{100}$ rupees

                     = 7 + 0.07

                     = 7.07 rupees

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

                         = 77 rupees + 0.77 rupees

= 77. 77 rupees

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

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

3. (i) Express 5 cm in metre and kilometre

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

   Answer:

   (i) 1 m = 100 cm

      1 cm = $\frac{1}{100}$ m

   ∴ 5 cm = $\frac{5}{100}$ m = 0.05 m

      1 km = 1000 m = (1000 × 100) cm = 1,00,000 cm

      1 cm = $\frac{1}{1,00,000}$ km

   ∴ 5 cm = $\frac{5}{1,00,000}$ km = 0.00005 km

   (ii) 1 cm = 10 mm

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

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

      1 m = 100 cm = (100 × 10) mm = 1000 mm

      1 mm = $\frac{1}{1000}$ m

   ∴ 35 mm = $\frac{35}{1000}$ m = 0.035 m

      1 km = 1,00,000 cm = (1,00,000 × 10) mm = 10,00,000 mm

      1 mm = $\frac{1}{10,00,000}$ km

   ∴ 35 mm = $\frac{35}{10,00,000}$ km = 0.00035 km

4. Express in kg:

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

Answer:

   (i) 200 g = $\frac{200}{1000}$ kg = 0.200 kg

   (ii) 3470 g = $\frac{3470}{1000}$ kg = 3.470 kg

   (iii) 4 kg 8 g = 4 kg + $\frac{8}{1000}$ kg = 4 + 0.008 = 4.008 kg

5. Write the following decimal numbers in the expanded form:

   (i) 20.03   (ii) 2.03   (iii) 200.03   (iv) 2.034

   Answer:

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

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

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

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

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:

   (i) 2.56   -   2 is at ones place.

   (ii) 21.37   -   2 is at tens place.
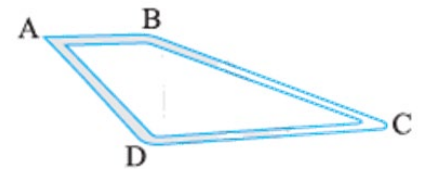
   (iii) 10.25   -   2 is at tenths place.

   (iv) 9.42   -   2 is at hundredths place.

(v) 63.352   -   2 is at thousandths place.

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:

Given:

Distance travelled by Dinesh from A to B = 7.5 km

And from place B to place C = 12.7 km

∴ Total distance travelled by Dinesh = AB + BC

= 7.5 km + 12.7 km

= 20.2 km

Distance travelled by Ayub from place A to place D = 9.3 km

And from place D to place C = 11.8 km

∴ Total distance travelled by Ayub = AD + DC

= 9.3 km + 11.8 km

= 21.1 km

On comparing the total distance travelled by Dinesh and Ayub, we get

21.1 km > 20.2 km

i.e., Distance travelled by Ayub > Distance travelled by Dinesh

∴ Ayub covered more distance than Dinesh by,

21.1 − 20.2 = 0.9 km

= 0.9 × 1000 m

= 900 m

8. Shyama 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:

Weight of apples bought by Shyama = 5 kg 300 g

Weight of mangoes bought by Shyama = 3 kg 250 g

∴ Total weight of fruits bought by Shyama = 5 kg 300 g + 3 kg 250 g

= 8 kg 550 g

Also,

Weight of oranges bought by Sarala = 4 kg 800 g

Weight of oranges bought by Sarala = 4 kg 150 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, we get 8 kg 950 g > 8 kg 550 g

Thus, Sarala bought more fruits.

9. How much less is 28 km than 42.6 km?

Answer: Difference = 42.6 − 28 = 14. 6 km

Thus, 14.6 km less is 28 km than 42.6 km.