Mathematics
(www.tiwariacademy.com)
(Chapter - 2) (Fractions and Decimals)
(Class - VII)

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:
\[\text{100 paise} = \text{₹1}\]
\[\therefore \text{1 paisa} = \frac{1}{100}\]
\[\text{(i) 7 paise} = \frac{7}{100} = \text{₹0.07}\]
\[\text{(ii) 7 rupees 7 paise} = 7 + \frac{7}{100} = \text{₹7 + ₹0.07 = ₹7.07}\]
\[\text{(iii) 77 rupees 77 paise} = 77 + \frac{77}{100} = \text{₹77 + ₹0.77 = ₹77.77}\]
\[\text{(iv) 50 paise} = \frac{50}{100} = \text{₹0.50}\]
\[\text{(v) 235 paise} = \frac{235}{100} = \text{₹2.35}\]

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,
\[\therefore 1000 \text{ meters} = 1 \text{ kilometers}\]
\[\therefore 1 \text{ meter} = \frac{1}{1000} \text{ kilometers}\]
\[\Rightarrow 0.05 \text{ meter} = \frac{0.05}{1000} = 0.00005 \text{ kilometer}\]
(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 g = 1 kg
\[ \Rightarrow 1 \text{ g} = \frac{1}{1000} \text{ kg} \]

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

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

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

**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) \[ 20.03 = 2 \times 10 + 0 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100} \]

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

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

(iv) \[ 2.034 = 2 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100} + 4 \times \frac{1}{1000} \]
Mathematics

(www.tiwariacademy.com)
(Chapter - 2) (Fractions and Decimals)
(Class – VII)

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 x \frac{1}{10} = 2 tenths
(iv) Place value of 2 in 9.42 = 2 x \frac{1}{100} = 2 hundredth
(v) Place value of 2 in 63.352 = 2 x \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.