NCERT Solutions For Class 7 Maths Fractions and Decimals Exercise 2.5

Q1. 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

Ans:

(i) 0.5 or 0.05

Converting these decimal numbers into equivalent fractions,

$$0.5 = \frac{5}{10} = \frac{5 \times 10}{10 \times 10} = \frac{50}{100} \text{ and } 0.05 = \frac{5}{100}$$

It can be observed that both fractions have the same denominator.

As 50 > 5,

Therefore, 0.5 > 0.05

(ii) 0.7 or 0.5

Converting these decimal numbers into equivalent fractions,

$$0.7 = \frac{7}{10} \text{ and } 0.5 = \frac{5}{10}$$

It can be observed that both fractions have the same denominator.

As 7 > 5,

Therefore, 0.7 > 0.5

(iii) 7 or 0.7

Converting these decimal numbers into equivalent fractions,

$$7 = \frac{7}{1} = \frac{7 \times 10}{1 \times 10} = \frac{70}{10} \text{ and } 0.7 = \frac{7}{10}$$

It can be observed that both fractions have the same denominator.

As $70 > 7$,

Therefore, $7 > 0.7$

(iv) 1.37 or 1.49

Converting these decimal numbers into equivalent fractions,

$$1.37 = \frac{137}{100} \text{ and } 1.49 = \frac{149}{100}$$

It can be observed that both fractions have the same denominator.

As $137 < 149$,

Therefore, $1.37 < 1.49$

(v) 2.03 or 2.30

Converting these decimal numbers into equivalent fractions,

$$2.03 = \frac{203}{100} \text{ and } 2.30 = \frac{230}{100}$$

It can be observed that both fractions have the same denominator.

As $203 < 230$,

Therefore, $2.03 < 2.30$

(vi) 0.8 or 0.88

Converting these decimal numbers into equivalent fractions,

$$0.8 = \frac{8}{10} = \frac{8 \times 10}{10 \times 10} = \frac{80}{100} \text{ and } 0.88 = \frac{88}{100}$$

It can be observed that both fractions have the same denominator.

As 80 < 88,

Therefore, 0.8 < 0.88

Q2. Express as rupees using decimals:

(i) 7 paise (ii) 7 rupees 7 paise (iii) 77 rupees 77 paise

(iv) 50 paise (v) 235 paise

Ans:

There are 100 paise in 1 rupee. Therefore, if we want to convert paise into rupees, then we have to divide paise by 100.

(i) 7 paise = Rs $\dfrac{7}{100}$ = Rs 0.07

(ii) 7 Rs 7 paise = Rs 7 + Rs $\dfrac{7}{100}$

= Rs 7.07

(iii) 77 Rs 77 paise = Rs 77 + Rs $\dfrac{77}{100}$ = Rs 77.77

(iv) 50 paise = Rs $\dfrac{50}{100}$ = Rs 0.50

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

Q3. (i) Express 5 cm in metre and kilometre

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

Ans:

(i) 5 cm

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

$$5 \text{ cm} = \frac{5}{100000} \text{ km} = 0.00005 \text{ km}$$

(ii) 35 mm

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

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

$$35\text{mm} = \frac{35}{1000000} \text{ km} = 0.000035 \text{ km}$$

Q4. Express in kg:

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

Ans:

(i) $200 \text{ g} = \frac{200}{1000} \text{ kg} = 0.2 \text{ kg}$

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

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

Q5. Write the following decimal numbers in the expanded form:

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

(iv) 2.034

Ans:

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

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

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

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

Q6. 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

Ans:

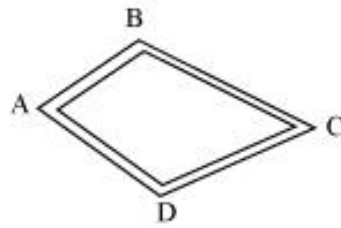(i) 2.56

Ones

(ii) 21.37

Tens

(iii) 10.25

Tenths

(iv) 9.42

Hundredths

(v) 63.352

Thousandths

Q7. 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?

Ans:

Distance travelled by Dinesh = AB + BC = (7.5 + 12.7) km

```
   7.5
+12.7
─────
 20.2
─────
```

Therefore, Dinesh travelled 20.2 km.

Distance travelled by Ayub = AD + DC = (9.3 + 11.8) km

```
   9.3
+11.8
─────
 21.1
─────
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Therefore, Ayub travelled 21.1 km.

Hence, Ayub travelled more distance.

Difference = (21.1 - 20.2) km

$$
\begin{array}{r}
21.1 \\
-20.2 \\
\hline
0.9 \\
\hline
\end{array}
$$

Therefore, Ayub travelled 0.9 km more than Dinesh.

Q8. 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?

Ans:

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

= 8 kg 550 g

$$= \left(8 + \frac{550}{1000}\right) kg$$

= 8.550 kg

Total fruits bought by Sarala = 4 kg 800 g + 4 kg 150 g

= 8 kg 950 g

$$= \left(8 + \frac{950}{1000}\right) kg$$

= 8.950 kg

∴ Sarala bought more fruits.

Q9. How much less is 28 km than 42.6 km?

Ans:

$$
\begin{array}{r}
42.6 \\
-28.0 \\
\hline
14.6 \\
\hline
\end{array}
$$

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

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