

Access answers to Maths NCERT Solutions for Class 7 Chapter 2 – Fractions and Decimals

Exercise 2.5

1. Which is greater?

(i) 0.5 or 0.05

Solution:-

By comparing whole number, $0 = 0$

By comparing the tenths place digit, $5 > 0$

$\therefore 0.5 > 0.05$

(ii) 0.7 or 0.5

Solution:-

By comparing whole number, $0 = 0$

By comparing the tenths place digit, $7 > 5$

$\therefore 0.7 > 0.5$

(iii) 7 or 0.7

Solution:-

By comparing whole number, $7 > 0$

$\therefore 7 > 0.7$

(iv) 1.37 or 1.49

Solution:-

By comparing whole number, $1 = 1$

By comparing the tenths place digit, $3 < 4$

$\therefore 1.37 < 1.49$

(v) 2.03 or 2.30

Solution:-

By comparing whole number, $2 = 2$

By comparing the tenths place digit, $0 < 3$

$$\therefore 2.03 < 2.30$$

(vi) 0.8 or 0.88**Solution:-**

By comparing whole number, $0 = 0$

By comparing the tenths place digit, $8 = 8$

By comparing the hundredths place digit, $0 < 8$

$$\therefore 0.8 < 0.88$$

2. Express as rupees as decimals:**(i) 7 paise****Solution:-**

We know that,

$$= \square 1 = 100 \text{ paise}$$

$$= 1 \text{ paise} = \square (1/100)$$

$$\therefore 7 \text{ paise} = \square (7/100)$$

$$= \square 0.07$$

(ii) 7 rupees 7 paise**Solution:-**

We know that,

$$= \square 1 = 100 \text{ paise}$$

$$= 1 \text{ paise} = \square (1/100)$$

$$\therefore 7 \text{ rupees } 7 \text{ paise} = \square 7 + \square (7/100)$$

$$= \square 7 + \square 0.07$$

$$= \square 7.07$$

(iii) 77 rupees 77 paise

Solution:-

We know that,

$$= \square 1 = 100 \text{ paise}$$

$$= 1 \text{ paise} = \square (1/100)$$

$$\therefore 77 \text{ rupees } 77 \text{ paise} = \square 77 + \square (77/100)$$

$$= \square 77 + \square 0.77$$

$$= \square 7.77$$

(iv) 50 paise

Solution:-

We know that,

$$= \square 1 = 100 \text{ paise}$$

$$= 1 \text{ paise} = \square (1/100)$$

$$\therefore 50 \text{ paise} = \square (50/100)$$

$$= \square 0.50$$

(v) 235 paise

Solution:-

We know that,

$$= \square 1 = 100 \text{ paise}$$

$$= 1 \text{ paise} = \square (1/100)$$

$$\therefore 235 \text{ paise} = \square (235/100)$$

$$= \square 2.35$$

3. (i) Express 5 cm in meter and kilometer

Solution:-

We know that,

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

Then,

$$= 1 \text{ cm} = (1/100) \text{ m}$$

$$= 5 \text{ cm} = (5/100)$$

$$= 0.05 \text{ m}$$

Now,

$$= 1 \text{ km} = 1000 \text{ m}$$

Then,

$$= 1 \text{ m} = (1/1000) \text{ km}$$

$$= 0.05 \text{ m} = (0.05/1000)$$

$$= 0.00005 \text{ km}$$

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

Solution:-

We know that,

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

Then,

$$= 1 \text{ mm} = (1/10) \text{ cm}$$

$$= 35 \text{ mm} = (35/10) \text{ cm}$$

$$= 3.5 \text{ cm}$$

And,

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

Then,

$$= 1 \text{ cm} = (1/100) \text{ m}$$

$$= 3.5 \text{ cm} = (3.5/100) \text{ m}$$

$$= (35/1000) \text{ m}$$

$$= 0.035 \text{ m}$$

Now,

$$= 1 \text{ km} = 1000 \text{ m}$$

Then,

$$= 1 \text{ m} = (1/1000) \text{ km}$$

$$= 0.035 \text{ m} = (0.035/1000)$$

$$= 0.000035 \text{ km}$$

4. Express in kg:

(i) 200 g

Solution:-

We know that,

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

Then,

$$= 1 \text{ g} = (1/1000) \text{ kg}$$

$$= 200 \text{ g} = (200/1000) \text{ kg}$$

$$= (2/10)$$

$$= 0.2 \text{ kg}$$

(ii) 3470 g

Solution:-

We know that,

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

Then,

$$= 1 \text{ g} = (1/1000) \text{ kg}$$

$$= 3470 \text{ g} = (3470/1000) \text{ kg}$$

$$= (3470/100)$$

$$= 3.470 \text{ kg}$$

(ii) 4 kg 8 g

Solution:-

We know that,

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

Then,

$$= 1 \text{ g} = (1/1000) \text{ kg}$$

$$= 4 \text{ kg } 8 \text{ g} = 4 \text{ kg} + (8/1000) \text{ kg}$$

$$= 4 \text{ kg} + 0.008$$

$$= 4.008 \text{ kg}$$

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

(i) 20.03

Solution:-

We have,

$$20.03 = (2 \times 10) + (0 \times 1) + (0 \times (1/10)) + (3 \times (1/100))$$

(ii) 2.03

Solution:-

We have,

$$2.03 = (2 \times 1) + (0 \times (1/10)) + (3 \times (1/100))$$

(iii) 200.03

Solution:-

We have,

$$200.03 = (2 \times 100) + (0 \times 10) + (0 \times 1) + (0 \times (1/10)) + (3 \times (1/100))$$

(iv) 2.034

Solution:-

We have,

$$2.034 = (2 \times 1) + (0 \times (1/10)) + (3 \times (1/100)) + (4 \times (1/1000))$$

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

(i) 2.56

Solution:-

From the question, we observe that,

The place value of 2 in 2.56 is ones

(ii) 21.37

Solution:-

From the question, we observe that,

The place value of 2 in 21.37 is tens

(iii) 10.25

Solution:-

From the question, we observe that,

The place value of 2 in 10.25 is tenths.

(iv) 9.42

Solution:-

From the question, we observe that,

The place value of 2 in 9.42 is hundredth.

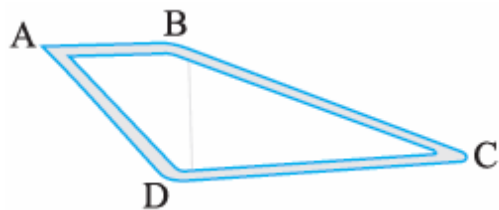
(v) 63.352

Solution:-

From the question, we observe that,

The place value of 2 in 63.352 is thousandth.

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?



Solution:-

From the question, it is given that,

Distance travelled by Dinesh = $AB + BC$

$= 7.5 + 12.7$

$= 20.2 \text{ km}$

∴ Dinesh travelled 20.2 km

$$\begin{aligned}\text{Distance travelled by Ayub} &= AD + DC \\ &= 9.3 + 11.8 \\ &= 21.1 \text{ km}\end{aligned}$$

∴ Ayub travelled 21.1 km

$$\begin{aligned}\text{Clearly, Ayub travelled more distance by} &= (21.1 - 20.2) \\ &= 0.9 \text{ km}\end{aligned}$$

∴ Ayub travelled 0.9 km more than Dinesh.

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?

Solution:-

From the question, it is given that,

$$\begin{aligned}\text{Fruits bought by Shyama} &= 5 \text{ kg } 300 \text{ g} \\ &= 5 \text{ kg} + (300/1000) \text{ kg} \\ &= 5 \text{ kg} + 0.3 \text{ kg} \\ &= 5.3 \text{ kg}\end{aligned}$$

$$\begin{aligned}\text{Fruits bought by Sarala} &= 4 \text{ kg } 800 \text{ g} + 4 \text{ kg } 150 \text{ g} \\ &= (4 + (800/1000)) + (4 + (150/1000)) \\ &= (4 + 0.8) \text{ kg} + (4 + .150) \text{ kg} \\ &= 4.8 \text{ kg} + 4.150 \text{ kg} \\ &= 8.950 \text{ kg}\end{aligned}$$

So, Sarala bought more fruits.

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

Solution:-

$$\begin{aligned}\text{Now, we have to find the difference of } &42.6 \text{ km and } 28 \text{ km} \\ &42.6 \\ &-28.0 \\ &\hline &14.6\end{aligned}$$

\therefore 14.6 km less is 28 km than 42.6 km.