

RD SHARMA

Solutions

Class 7 Maths

Chapter 3

Ex 3.1

Q1. Write each of the following as decimals:

(i) $\frac{8}{100}$

Mark the decimal point two places from right to left

$$= \frac{8}{100} = 0.08$$

(ii) $20 + \frac{9}{10} + \frac{4}{100}$

Convert $\frac{9}{10}$ and $\frac{4}{100}$ into decimals

$$\frac{9}{10}$$

Mark the decimal point one place from right to left

$$\frac{9}{10} = 0.9$$

$$\frac{4}{100}$$

Mark the decimal point two places from right to left

$$\frac{4}{100}$$

$$= 0.04$$

$$= 20 + \frac{9}{10} + \frac{4}{100}$$

$$= 20 + 0.9 + 0.04$$

$$= 20.94$$

(iii) $23 + \frac{2}{10} + \frac{6}{1000}$

Convert $\frac{2}{10}$ and $\frac{6}{1000}$ into decimals

$$\frac{2}{10}$$

Mark the decimal point one place from right to left

$$\frac{2}{10}$$

$$= 0.2$$

$$\frac{6}{1000}$$

Mark the decimal point three places from right to left

$$\frac{6}{1000}$$

$$= 0.006$$

23, 0.2, 0.006 are unlike decimals. So we convert them into like decimals.

$$= 23 + \frac{2}{10} + \frac{6}{1000}$$

$$= 23 + 0.2 + 0.006$$

$$= 23.206$$

Q2. Convert each of the following into fractions in the lowest form:

(i) 0.04

$$= \frac{0.04}{1}$$

$$= \frac{0.04 \times 100}{1 \times 100}$$

$$= \frac{4}{100}$$

$$= \frac{1}{25}$$

(ii) 2.34

$$= \frac{2.34}{1}$$

$$= \frac{2.34 \times 100}{1 \times 100}$$

$$= \frac{234}{100}$$

$$= \frac{117}{50}$$

(iii) 0.342

$$\begin{aligned} &= \frac{0.342}{1} \\ &= \frac{0.342 \times 1000}{1 \times 1000} \\ &= \frac{342}{1000} \\ &= \frac{171}{500} \end{aligned}$$

(iv) 17.38

$$\begin{aligned} &= \frac{17.38}{1} \\ &= \frac{17.38 \times 100}{1 \times 100} \\ &= \frac{1738}{100} \\ &= \frac{869}{50} \end{aligned}$$

Q3. Express the following fractions as decimals:

(ii) $\frac{23}{10}$

$$\begin{aligned} &= \frac{23}{10} \\ &= 2.3 \end{aligned}$$

(i) $25\frac{1}{8}$

$$\begin{aligned} &= 25 + \frac{1}{8} \\ &= 25 + \frac{1 \times 125}{8 \times 125} \\ &= 25 + \frac{125}{1000} \\ &= 25 + 0.125 \\ &= 25.125 \end{aligned}$$

(iii) $39\frac{7}{35}$

$$\begin{aligned} &= \frac{1372}{35} \\ &= 39.2 \end{aligned}$$

(iv) $15\frac{1}{25}$

$$\begin{aligned} &= 15 + \frac{1}{25} \\ &= 15 + \frac{1 \times 4}{25 \times 4} \\ &= 15 + \frac{4}{100} \\ &= 15 + 0.04 \\ &= 15.04 \end{aligned}$$

Q4. Add the following:

(i) 41.8, 39.24, 5.01 and 62.6

(ii) 18.03, 146.3, 0.829 and 5.324

Q5. Find the value of:

(i) 9.756 - 6.28

(ii) 48.1 - 0.37

(iii) 108.032 - 86.8

(iv) 100 - 26.32

Q6. Take out 3.547 from 7.2

Q7. What is to be added to 36.85 to get 59.41?

$$x+36.85=59.41$$

$$x=59.41-36.85$$

$$x=22.56$$

Therefore 22.56 is added to 36.85 to get 59.41

Q8. What is to be subtracted from 17.1 to get 2.051?

$$17.1-x=2.051$$

$$17.1=x+2.051$$

$$x=17.1-2.051$$

$$x=15.049$$

Therefore 15.049 is subtracted from 17.1 to get 15.049

Q9. By how much should 34.79 be increased to get 70.15?

$$34.79+x=70.15$$

$$x=70.15-34.79$$

$$x=35.36$$

Therefore 35.36 is increased to 70.15

Q10. By how much should 59.71 be decreased to get 34.58?

$$59.71-x=34.58$$

$$59.71-34.58=x$$

$$x=25.13$$

Therefore 25.13 is decreased to get 34.58