

Board – CBSE

Class – 7th

Topic – Fractions and Decimals 2.7

Q.1 Find:

(i) $0.4 \div 2$ (ii) $0.35 \div 5$ (iii) $2.48 \div 4$ (iv) $65.4 \div 6$

(v) $651.2 \div 4$ (vi) $14.49 \div 7$ (vii) $3.96 \div 4$ (viii) $0.80 \div 5$

Sol: (i) $0.4 \div 2 = \frac{4}{10} \times \frac{1}{2} = \frac{2}{10} = 0.2$ (ii) $0.35 \div 5 = \frac{35}{100} \times \frac{1}{5} = \frac{7}{100} = 0.07$

(iii) $2.48 \div 4 = \frac{248}{100} \times \frac{1}{4} = \frac{62}{100} = 0.62$ (iv) $65.4 \div 6 = \frac{654}{10} \times \frac{1}{6} = \frac{109}{10} = 10.9$

(v) $651.2 \div 4 = \frac{6512}{10} \times \frac{1}{4} = \frac{1628}{10} = 162.8$ (vi) $14.49 \div 7 = \frac{1449}{100} \times \frac{1}{7} = \frac{207}{100}$
 $= 2.07$

(vii) $3.96 \div 4 = \frac{396}{100} \times \frac{1}{4} = \frac{99}{100} = 0.99$ (viii) $0.80 \div 5 = \frac{80}{100} \times \frac{1}{5} = \frac{16}{100} = 0.16$

Q.2 Find:

(i) $4.8 \div 10$ (ii) $52.5 \div 10$ (iii) $0.7 \div 10$ (iv) $33.1 \div 10$

(v) $272.23 \div 10$ (vi) $0.56 \div 10$ (vii) $3.97 \div 10$

Sol: We know that when a decimal number is divided by a multiple of 10 only (i.e., 10, 100, 1000, etc.), the decimal point will be shifted to the left by as many places as there are zeroes. Since here we are dividing by 10, the decimal will shift to the left by 1 place.

(i) $4.8 \div 10 = 0.48$ (ii) $52.5 \div 10 = 5.25$ (iii) $0.7 \div 10 = 0.07$

(iv) $33.1 \div 10 = 3.31$ (v) $272.23 \div 10 = 27.223$ (vi) $0.56 \div 10 = 0.056$

(vii) $3.97 \div 10 = 0.397$

Q.3 Find:

(i) $2.7 \div 100$ (ii) $0.3 \div 100$ (iii) $0.78 \div 100$ (iv) $432.6 \div 100$

(v) $23.6 \div 100$ (vi) $98.53 \div 100$

Sol: We know that when a decimal number is divided by a multiple of 10 only (i.e., 10, 100, 1000, etc.), the decimal point will be shifted to the left by as many places as

there are zeroes. Since here we are dividing by 100, the decimal will shift to the left by 2 places.

$$\begin{array}{lll} \text{(i)} 2.7 \div 100 = 0.027 & \text{(ii)} 0.3 \div 100 = 0.003 & \text{(iii)} 0.78 \div 100 = 0.0078 \\ \text{(iv)} 432.6 \div 100 = 4.326 & \text{(v)} 23.6 \div 100 = 0.236 & \text{(vi)} 98.53 \div 100 = 0.9853 \end{array}$$

Q.4 Find:

$$\begin{array}{llll} \text{(i)} 7.9 \div 1000 & \text{(ii)} 26.3 \div 1000 & \text{(iii)} 38.53 \div 1000 & \text{(iv)} 128.9 \div 1000 \\ \text{(v)} 0.5 \div 1000 & & & \end{array}$$

Sol: We know that when a decimal number is divided by a multiple of 10 only (i.e., 10, 100, 1000, etc.), the decimal point will be shifted to the left by as many places as there are zeroes. Since here we are dividing by 1000, the decimal will shift to the left by 3 places.

$$\begin{array}{ll} \text{(i)} 7.9 \div 1000 = 0.0079 & \text{(ii)} 26.3 \div 1000 = 0.0263 \\ \text{(iii)} 38.53 \div 1000 = 0.03853 & \text{(iv)} 128.9 \div 1000 = 0.1289 \\ \text{(v)} 0.5 \div 1000 = 0.0005 & \end{array}$$

Q.5 Find:

$$\begin{array}{llll} \text{(i)} 7 \div 3.5 & \text{(ii)} 36 \div 0.2 & \text{(iii)} 3.25 \div 0.5 & \text{(iv)} 30.94 \div 0.7 \\ \text{(v)} 0.5 \div 0.25 & \text{(vi)} 7.75 \div 0.25 & \text{(vii)} 76.5 \div 0.15 & \text{(viii)} 37.8 \div 1.4 \\ \text{(ix)} 2.73 \div 1.3 & & & \end{array}$$

Sol: (i) $7 \div 3.5 = 7 \div \frac{35}{10} = 2$

(ii) $36 \div 0.2 = 36 \div \frac{2}{10} = 36 \times \frac{10}{2} = 180$

(iii) $3.25 \div 0.5 = \frac{325}{100} \div \frac{5}{10} = \frac{325}{100} \times \frac{10}{5} = \frac{65}{10} = 6.5$

(iv) $30.94 \div 0.7 = \frac{3094}{100} \div \frac{7}{10} = \frac{3094}{100} \times \frac{10}{7} = \frac{442}{10} = 44.2$

(v) $0.5 \div 0.25 = \frac{5}{10} \div \frac{25}{100} = \frac{5}{10} \times \frac{100}{25} = 2$

(vi) $7.75 \div 0.25 = \frac{775}{100} \div \frac{25}{100} = \frac{775}{100} \times \frac{100}{25} = 31$

$$(vii) 76.5 \div 0.15 = \frac{765}{10} \div \frac{15}{100} = \frac{765}{10} \times \frac{100}{15} = 510$$

$$(viii) 37.8 \div 1.4 = \frac{378}{10} \div \frac{14}{10} = \frac{378}{10} \times \frac{10}{14} = 27$$

$$(ix) 2.73 \div 1.3 = \frac{273}{100} \div \frac{13}{10} = \frac{273}{100} \times \frac{10}{13} = \frac{21}{10} = 2.1$$

Q.6 A vehicle covers a distance of 43.2 km in 2.4 liters of petrol. How much distance will it cover in one liter of petrol?

Sol: Distance covered in 2.4 litres of petrol = 43.2 km

$$\therefore \text{Distance covered in 1 litre of petrol} = 43.2 \div 2.4 = \frac{432}{10} \div \frac{24}{10} = \frac{432}{10} \times \frac{10}{24} = 18$$

km

Therefore, the vehicle will cover 18 km in 1 litre petrol.