NCERT Solutions For Class 7 Maths Fractions and Decimals Exercise 2.7

Q1. Find:

(i) 0.4 ÃƒÂ· 2 (ii) 0.35 ÃƒÂ· 5 (iii) 2.48 ÃƒÂ· 4

(iv) 65.4 ÃƒÂ· 6 (v) 651.2 ÃƒÂ· 4 (vi) 14.49 ÃƒÂ· 7

(vii) 3.96 ÃƒÂ· 4 (viii) 0.80 ÃƒÂ· 5

Ans:

$$(i)\ 0.4 \div 2 = \frac{4}{10} \div 2 = \frac{4}{10} \times \frac{1}{2} = \frac{2}{10} = 0.2$$

$$(ii)\ 0.35 \div 5 = \frac{35}{100} \div 5 = \frac{35}{100} \times \frac{1}{5} = \frac{7}{100} = 0.07$$

$$(iii)\ 2.48 \div 4 = \frac{248}{100} \div 4 = \frac{248}{100} \times \frac{1}{4} = \frac{62}{100} = 0.62$$

$$(iv)\ 65.4 \div 6 = \frac{654}{10} \div 6 = \frac{654}{10} \times \frac{1}{6} = \frac{109}{10} = 10.9$$

$$(v)\ 651.2 \div 4 = \frac{6512}{10} \div 4 = \frac{6512}{10} \times \frac{1}{4} = \frac{1628}{10} = 162.8$$

$$(vi)\ 14.49 \div 7 = \frac{1449}{100} \div 7 = \frac{1449}{100} \times \frac{1}{7} = \frac{207}{100} = 2.07$$

$$(vii)\ 3.96 \div 4 = \frac{396}{100} \div 4 = \frac{396}{100} \times \frac{1}{4} = \frac{99}{100} = 0.99$$

$$(viii)\ 0.80 \div 5 = \frac{80}{100} \div 5 = \frac{80}{100} \times \frac{1}{5} = \frac{16}{100} = 0.16$$

Q2. Find:

(i) 4.8 ÃƒÂ· 10 (ii) 52.5 ÃƒÂ· 10 (iii) 0.7 ÃƒÂ· 10

(iv) 33.1 ÃƒÂ· 10 (v) 272.23 ÃƒÂ· 10 (vi) 0.56 ÃƒÂ· 10

(vii) 3.97 ÃƒÂ· 10

Ans:

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 ÃƒÂ· 10 = 0 .48

(ii) 52.5 ÃƒÂ· 10 = 5.25

(iii) 0.7 ÃƒÂ· 10 = 0.07

(iv) 33.1 ÃƒÂ· 10 = 3.31

(v) 272.23 ÃƒÂ· 10 = 27.223

(vi) 0.56 ÃƒÂ· 10 = 0.056

(vii) 3.97 ÃƒÂ· 10 = 0.397

Q3. Find:

(i) 2.7 ÃƒÂ· 100 (ii) 0.3 ÃƒÂ· 100 (iii) 0.78 ÃƒÂ· 100

(iv) 432.6 ÃƒÂ· 100 (v) 23.6 ÃƒÂ· 100 (vi) 98.53 ÃƒÂ· 100

Ans:

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.

(i) 2.7 ÃƒÂ· 100 = 0.027

(ii) 0.3 ÃƒÂ· 100 = 0.003

(iii) 0.78 ÃƒÂ· 100 = 0.0078

(iv) 432.6 ÃƒÂ· 100 = 4.326

(v) 23.6 ÃƒÂ· 100 = 0.236

(vi) 98.53 ÃƒÂ· 100 = 0.9853

Q4. Find:

(i) 7.9 ÃƒÂ· 1000 (ii) 26.3 ÃƒÂ· 1000 (iii) 38.53 ÃƒÂ· 1000

(iv) 128.9 ÃƒÂ· 1000 (v) 0.5 ÃƒÂ· 1000

Ans:

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.

(i) 7.9 ÃƒÂ· 1000 = 0.0079

(ii) 26.3 ÃƒÂ· 1000 = 0.0263

(iii) 38.53 ÃƒÂ· 1000 = 0.03853

(iv) 128.9 ÃƒÂ· 1000 = 0.1289

(v) 0.5 ÃƒÂ· 1000 = 0.0005

Q5. Find:

(i) 7 ÃƒÂ· 3.5 (ii) 36 ÃƒÂ· 0.2 (iii) 3.25 ÃƒÂ· 0.5

(iv) 30.94 ÃƒÂ· 0.7 (v) 0.5 ÃƒÂ· 0.25 (vi) 7.75 ÃƒÂ· 0.25

(vii) 76.5 ÃƒÂ· 0.15 (viii) 37.8 ÃƒÂ· 1.4 (ix) 2.73 ÃƒÂ· 1.3

Ans:

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

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

Q6. A vehicle covers a distance of 43.2 km in 2.4 litres of petrol. How much distance will it cover in one litre of petrol?

Ans:

Distance covered in 2.4 litres of petrol = 43.2 km

∴Distance covered in 1 litre of petrol =

$43.2 \div 2.4 = \frac{432}{10} \div \frac{24}{10} = \frac{432}{10} \times \frac{10}{24} = 18$

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

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