Mathematics

Class - VII, Ch-02. Ex-2.7

Complete Solution.

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) $0.80 \div 5$

Sol. (i) $0.2 \div 2$

$= \frac{2}{10} \div 2 = \frac{\cancel{2}}{10} \times \frac{1}{\cancel{2}} = \frac{1}{10}$

$= 0.1$

(ii) $0.35 \div 5$

$= 0.35 \times \frac{1}{5} = \frac{\overset{7}{\cancel{35}}}{100} \times \frac{1}{\cancel{5}} = \frac{7}{100}$

$= 0.07$

(iii) $2.48 \div 4$

$= 2.48 \times \frac{1}{4} = \frac{\overset{62}{\cancel{248}}}{100} \times \frac{1}{\cancel{4}} = \frac{62}{100}$

$= 0.62$

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

$= 10.9$

(v) $651.2 \div 4$

$= 651.2 \times \frac{1}{4} = \frac{6512}{10} \times \frac{1}{4} = \frac{1628}{10}$

$= 162.8$

(vi) $0.80 \div 5$

$= 0.80 \times \frac{1}{5} = \frac{80}{100} \times \frac{1}{5} = \frac{16}{100}$

$= 0.16$

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) $0.56 \div 10$

Sol.

(i) $4.8 \div 10 = 4.8 \times \frac{1}{10}$

$= \frac{48}{10} \times \frac{1}{10} = \frac{48}{100} = 0.48$

(ii) $52.5 \div 10 = 52.5 \times \frac{1}{10}$

$= \frac{525}{10} \times \frac{1}{10} = \frac{525}{100} = 5.25$

(iii) $0.7 \div 10 = 0.7 \times \frac{1}{10}$

$= \frac{7}{10} \times \frac{1}{10} = \frac{7}{100} = 0.07$

(v) $272.23 \div 10$

$= 272.23 \times \frac{1}{10} = \frac{27223}{100} \times \frac{1}{10}$

$= \frac{27223}{1000} = 27.223$

(vi) $0.56 \div 10$

$= 0.56 \times \frac{1}{10} = \frac{56}{100} \times \frac{1}{10}$

$= \frac{56}{1000} = 0.056$

Q.3. Find

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

(iv) $432.6 \div 100$ (v) $23.6 \div 100$

Sol. (i) $2.7 \div 100 = 2.7 \times \frac{1}{100}$

$= \frac{27}{10} \times \frac{1}{100} = \frac{27}{1000} = 0.027.$

(ii) $0.3 \div 100 = 0.3 \times \frac{1}{100}$

$= \frac{3}{10} \times \frac{1}{100} = \frac{3}{1000} = 0.003$ →

(iii) $0.78 \div 100$

$= 0.78 \times \frac{1}{100} = \frac{78}{100} \times \frac{1}{100}$

$= \frac{78}{10000} = 0.0078$

(iv) $432.6 \div 100$

$= 432.6 \times \frac{1}{100} = \frac{4326}{10} \times \frac{1}{100}$

$= \frac{4326}{1000} = 4.326$

(v) $23.6 \div 100$

$= 23.6 \times \frac{1}{100} = \frac{236}{10} \times \frac{1}{100}$

$= \frac{236}{1000} = 0.236$

Q.4. Find

(i) $7.9 \div 1000$ (ii) $26.3 \div 1000$

(iii) $38.53 \div 1000$ (iv) $128.9 \div 1000$

Sol. (i) $7.9 \div 1000 = 7.9 \times \frac{1}{1000}$

$= \frac{79}{10} \times \frac{1}{1000} = \frac{79}{10000} = 0.0079$

(ii) $26.3 \div 1000 = 26.3 \times \frac{1}{1000}$

$= \frac{263}{10} \times \frac{1}{1000} = \frac{263}{10000} = 0.0263$

(iii) $38.53 \div 1000 = 38.53 \times \frac{1}{1000}$

$= \frac{3853}{100} \times \frac{1}{1000} = \frac{3853}{100000}$

$= 0.03853$

(iv) $128.9 \div 1000 = 128.9 \times \frac{1}{1000}$

$= \frac{1289}{10} \times \frac{1}{1000} = \frac{1289}{10000}$

$= 0.1289$

Q.5. Find

(i) $7 \div 3.5$ (ii) $3.25 \div 0.5$

(iii) $0.5 \div 0.25$ (iv) $76.5 \div 0.15$

Sol. (i) $7 \div 3.5 = 7 \times \frac{1}{3.5} = 7 \times \frac{10}{35}$

$= 7.0 \div 3.5$

$= 70 \div 35$

$= 2$ Ans

$= \frac{70}{35} = 2$ Ans

OR

$3.25 \div 0.50$

$= 325 \div 50$

$= 6.5$

(ii) $3.25 \div 0.5 = 3.25 \times \frac{1}{0.5}$

$= \frac{325}{100} \times \frac{10}{5} = \frac{65}{10} = 6.5$ →

(iii) $0.5 \div 0.25$

$= 0.5 \times \frac{1}{0.25} = \frac{5}{10} \times \frac{\cancel{100}^{4}}{\cancel{25}}$

$= \frac{20}{10} = 2$

(iv) $76.5 \div 0.15 = 76.5 \times \frac{1}{0.15}$

$= \frac{765}{10} \times \frac{100}{15} = \frac{\cancel{765}^{51} \times 10}{\cancel{15}} = 510$

Q.6 Sol.

Distance covered in 2.4 litre of petrol = 43.2 Km

∴ Distance covered in 1 litre of petrol $= \frac{43.2}{2.4}$ Km

$= \frac{432}{24} = \frac{\cancel{24} \times 18}{\cancel{24}} = 18$

Hence, Distance covered in 1 litre of petrol is 18 Km.