Fractions and Decimals: Exercise 2.7

Q.1 Find: (ii) $0.35 \div 5$ (iii) $2.48 \div 4$ (vi) $14.49 \div 7$ (vii) $3.96 \div 4$ (i) 0.4 ÷ 2 (iv) 65.4 ÷ 6 (v) 651.2 ÷ 4 (viii) 0.80 ÷ 5 Sol: (i) Given: $0.4 \div 2 = 0.4 \times (1/2)$ $= (4/10) \times (1/2)$ =(4x1)/(10x2)= 4/20= 2/10Since, here 10 in denominator. So, decimal point is shifted to the left by one places. = 0.2 (ii) Given: $0.35 \div 5 = (35/100) \times (1/5)$ =(35x1)/(100x5)= 7/100Since, here 100 in denominator. So, decimal point is shifted to the left by two places. = 0.07 (iii) Given: $2.48 \div 4 = (248/100) \times (1/4)$ =(248x1)/(100x4)= 62/100Since, here 100 in denominator. So, decimal point is shifted to the left by two places. = 0.62 (iv) Given: $65.4 \div 6 = (654/10) \times (1/6)$ =(654x1)/(10x6)= 109/10Since, here 10 in denominator. So, decimal point is shifted to the left by one places. = 10.9(v) Given: $651.2 \div 4 = (6512/10) \times (1/4)$ = (6512 x1)/(10 x4)= 1628/10Since, here 10 in denominator. So, decimal point is shifted to the left by one places. = 162.8(vi) Given: $14.49 \div 7 = (1449/100) \times (1/7)$ =(1449x1)/(100x7)= 207/100Since, here 100 in denominator. So, decimal point is shifted to the left by two places. = 2.07 (vii) Given: $3.96 \div 4 = (396/100) \times (1/4)$ =(396x1)/(100x4)= 99/100Since, here 100 in denominator. So, decimal point is shifted to the left by two places. = 0.99(viii) Given: $0.80 \div 5 = (80/100)x(1/5)$

Since, here 100 in denominator. So, decimal point is shifted to the left by two places. = 0.16 Q.2 Find: (i) 4.8 ÷ 10 (ii) 52.5 ÷ 10 (iii) 0.7 ÷ 10 (iv) 33.1 ÷ 10 (v) 272.23 ÷ 10 (vi) 0.56 ÷ 10 (vii) 3.97 ÷10 Sol: (i) Given: $4.8 \div 10 = (48/10) \times (1/10)$ =(48x1)/(10x10)= 48/100Since, here 100 in denominator. So, decimal point is shifted to the left by two places. = 0.48(ii) Given: $52.5 \div 10 = (525/10)x(1/10)$ =(525x1)/(10x10)= 525/100Since, here 100 in denominator. So, decimal point is shifted to the left by two places. = 5.25(iii) Given: $0.7 \div 10 = (7/10) \times (1/10)$ =(7x1)/(10x10)= 7/100Since, here 100 in denominator. So, decimal point is shifted to the left by two places. = 0.07 (iv) Given: $33.1 \div 10 = (331/10)x(1/10)$ =(331x1)/(10x10)= 331/100Since, here 100 in denominator. So, decimal point is shifted to the left by two places. = 3.31 (v) Given: $272.23 \div 10 = (27223/100) \times (1/10)$ =(27223x1)/(100x10)= 27223/1000 Since, here 1000 in denominator. So, decimal point is shifted to the left by three places. = 27.223 (vi) Given: $0.56 \div 10 = (56/100)x(1/10)$ =(56x1)/(100x10)= 56/1000Since, here 1000 in denominator. So, decimal point is shifted to the left by three places. = 0.056 (vii) Given: $3.97 \div 10 = (397/100) \times (1/10)$ =(397x1)/(100x10)= 397/1000Since, here 1000 in denominator. So, decimal point is shifted to the left by three places. = 0.397

=(80x1)/(100x5)

= 16/100

Q.3 Find: (i) 2.7 ÷ 100 (ii) 0.3 ÷ 100 (v) 23.6 ÷100 (iii) 0.78 ÷ 100 (iv) 432.6 ÷ 100 (vi) 98.53 ÷ 100 Sol: (i) Given: $2.7 \div 100 = (27/10) \times (1/100)$ =(27x1)/(10x100)= 27/1000Since, here 1000 in denominator. So, decimal point is shifted to the left by three places. = 0.027(ii) Given: $0.3 \div 100 = (3/10) \times (1/100)$ =(3x1)/(10x100)=(3/1000)Since, here 1000 in denominator. So, decimal point is shifted to the left by three places. = 0.003 (iii) Given: $0.78 \div 100 = (78/100)x(1/100)$ =(78x1)/100x100= 78/10000Since, here 10000 in denominator. So, decimal point is shifted to the left by four places. = 0.0078(iv) Given: $432.6 \div 100 = (4326/10)x(1/100)$ =(4326x1)/(10x100)= 4326/1000 Since, here 1000 in denominator. So, decimal point is shifted to the left by three places. = 4.326(v) Given: $23.6 \div 100 = (236/10)x(1/100)$ =(236x1)/10x100= 236/1000Since, here 1000 in denominator. So, decimal point is shifted to the left by three places. = 0.236(vi) Given: $98.53 \div 100 = (9853/100)x(1/100)$ =(9853x1)/(100x100)= 9853/10000 Since, here 10000 in denominator. So, decimal point is shifted to the left by four places. = 0.9853Q.4 Find: (i) 7.9 ÷ 1000 (ii) 26.3 ÷ 1000 (iii) 38.53 ÷ 1000 (iv) 128.9 ÷ 1000 (v) 0.5 ÷ 1000 Sol: (i) Given: $7.9 \div 1000 = (79/10)x(1/1000)$ =(79x1)/(10x1000)= 79/10000Since, here 10000 in denominator. So, decimal point is shifted to the left by four places. = 0.0079(ii) Given: $26.3 \div 1000 = (236/10)x(1/1000)$

=(236x1)/(10x1000)=(236/10000)Since, here 10000 in denominator. So, decimal point is shifted to the left by four places. = 0.0236 (iii) Given: $38.53 \div 1000 = (3853/100)x(1/1000)$ =(3853x1)/(100x1000)= 3856/100000 Since, here 100000 in denominator. So, decimal point is shifted to the left by five places. = 0.03856(iv) Given: $128.9 \div 1000 = (1289/10)x(1/1000)$ =(1289x1)/(10x1000)= 1289/10000Since, here 10000 in denominator. So, decimal point is shifted to the left by four places. = 0.1289 (v) Given: $0.5 \div 1000 = (5/10)x(1/1000)$ =(5x1)/(10x1000)= 5/10000 Since, here 10000 in denominator. So, decimal point is shifted to the left by four places. = 0.0005Q.5 Find: (i) 7 ÷ 3.5 (v) 0.5 ÷ 0.25 (ii) 36 ÷ 0.2 (iii) 3.25 ÷ 0.5 (vi) 7.75 ÷ 0.25 (vii) 76.5 ÷ 0.15 (iv) 30.94 ÷ 0.7 (viii) 37.8 ÷ 1.4 (ix) 2.73 ÷ 1.3 Sol: (i) Given: $7 \div 3.5 = 7 \div (35/10)$ $= 7 \, \mathrm{x} \, (10/35)$ = 10/5= 2 (ii) Given: $36 \div 0.2 = 36 \div (2/10)$ $= 36 \times (10/2)$ $= 18 \times 10^{-10}$ = 180(iii) Given: $3.25 \div 0.5 = (325/100) \div (5/10)$ =(325/100)x(10/5)= 65/10= 6.5(iv) Given: $30.94 \div 0.7 = (3094/100) \div (7/10)$ $= (3094/100) \times (10/7)$ =(3094x10)/(100x7)= 442/10= 44.2 (v) Given: $0.5 \div 0.25 = (5/10) \div (25/100)$ $= (5/10) \times (100/25)$ =(5x100)/(10x25)



Q.6 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?

Sol: Given: For a vehicle, distance covered in 2.4 litres of petrol = 43.2 km Thus, distance covered in 1 litre of petrol will be = $43.2 \div 2.4$

$$= (432/10) \div (24/10)$$

= (432/10) × (10/24)
= (432 × 10)/ (10 × 24)
= 18 km

Therefore, distance covered in 1 liter of petrol = 18 km