NCERT Solutions For Class 7 Maths Fractions and Decimals Exercise 2.6

Q1. Find:

(i) 0.2 x 6 (ii) 8 x 4.6 (iii) 2.71 x 5

(iv) 20.1 x 4 (v) 0.05 x 7 (vi) 211.02 x 4

(vii) 2 x 0.86

Ans:

$$(i)\ 0.2 \times 6 = \frac{2}{10} \times 6 = \frac{12}{10} = 1.2$$

$$(ii)\ 8 \times 4.6 = 8 \times \frac{46}{10} = \frac{368}{10} = 36.8$$

$$(iii)\ 2.71 \times 5 = \frac{271}{100} \times 5 = \frac{1355}{100} = 13.55$$

$$(iv)\ 20.1 \times 4 = \frac{201}{10} \times 4 = \frac{804}{10} = 80.4$$

$$(v)\ 0.05 \times 7 = \frac{5}{100} \times 7 = \frac{35}{100} = 0.35$$

$$(vi)\ 211.02 \times 4 = \frac{21102}{100} \times 4 = \frac{84408}{100} = 844.08$$

$$(vii)\ 2 \times 0.86 = 2 \times \frac{86}{100} = \frac{172}{100} = 1.72$$

Q2. Find the area of rectangle whose length is 5.7 cm and breadth is 3 cm.

Ans:

Length = 5.7 cm

Breadth = 3 cm

Area = Length x Breadth

= 5.7 x 3 = 17.1 cm^2

Q3. Find:

(i) 1.3 x 10 (ii) 36.8 x 10 (iii) 153.7 x 10

(iv) 168.07 x 10 (v) 31.1 x 100 (vi) 156.1 x 100

(vii) 3.62 x 100 (viii) 43.07 x 100 (ix) 0.5 x 10

(x) 0.08 x 10 (xi) 0.9 x 100 (xii) 0.03 x 1000

Ans:

We know that when a decimal number is multiplied by 10, 100, 1000, the decimal point in the product is shifted to the right by as many places as there are zeroes. Therefore, these products can be calculated as

(i) 1.3 x 10 = 13

(ii) 36.8 x 10 = 368

(iii) 153.7 x 10 = 1537

(vi) 168.07 x 10 = 1680.7

(v) 31.1 x 100 = 3110

(vi) 156.1 x 100 = 15610

(vii) 3.62 x 100 = 362

(viii) 43.07 x 100 = 4307

(ix) 0.5 x 10 = 5

(x) 0.08 x 10 = 0.8

(xi) 0.9 x 100 = 90

(xiii) 0.03 x 1000 = 30

Q4. A two-wheeler covers a distance of 55.3 km in one litre of petrol. How much distance will it cover in 10 litres of petrol?

Ans:

Distance covered in 1 litre of petrol = 55.3 km

Distance covered in 10litre of petrol = 10 x 55.3 = 553 km

Therefore, it will cover 553 km distance in 10 litre petrol.

Q5. Find:

(i) 2.5 x 0.3 (ii) 0.1 x 51.7 (iii) 0.2 x 316.8

(iv) 1.3 x 3.1 (v) 0.5 x 0.05 (vi) 11.2 x 0.15

(vii) 1.07 x 0.02 (viii) 10.05 x 1.05 (ix) 101.01 x 0.01

(x) 100.01 x 1.1

Ans:

(i) $2.5 \times 0.3 = \frac{25}{10} \times \frac{3}{10} = \frac{75}{100} = 0.75$

(ii) $0.1 \times 51.7 = \frac{1}{10} \times \frac{517}{10} = \frac{517}{100} = 5.17$

(iii) $0.2 \times 316.8 = \frac{2}{10} \times \frac{3168}{10} = \frac{6336}{100} = 63.36$

(iv) $1.3 \times 3.1 = \frac{13}{10} \times \frac{31}{10} = \frac{403}{100} = 4.03$

(v) $0.5 \times 0.05 = \frac{5}{10} \times \frac{5}{100} = \frac{25}{1000} = 0.025$

(vi) $11.2 \times 0.15 = \frac{112}{10} \times \frac{15}{100} = \frac{1680}{1000} = 1.680 = 1.68$

(vii) $1.07 \times 0.02 = \frac{107}{100} \times \frac{2}{100} = \frac{214}{10000} = 0.0214$

(viii) $10.05 \times 1.05 = \frac{1005}{100} \times \frac{105}{100} = \frac{105525}{10000} = 10.5525$

(ix) $101.01 \times 0.01 = \frac{10101}{100} \times \frac{1}{100} = \frac{10101}{10000} = 1.0101$

(x) $100.01 \times 1.1 = \frac{10001}{100} \times \frac{11}{10} = \frac{110011}{1000} = 110.011$

********** END **********