EXERCISE 3.2 PAGE NO: 3.8

1. Find the product:
(i) 4.74 × 10
(ii) 0.45 × 10
(iii) 0.0215 × 10
(iv) 0.0054 × 10

Solution:
(i) Given 4.74 × 10
Here we have to do normal multiplication with shifting the decimal point by one place to the right
Therefore 4.74 × 10 = 47.4

(ii) Given 0.45 × 10
Here we have to do normal multiplication with shifting the decimal point by one place to the right
Therefore 0.45 × 10 = 4.5

(iii) Given 0.0215 × 10
Here we have to do normal multiplication with shifting the decimal point by one place to the right
Therefore 0.0215 × 10 = 0.215

(iv) Given 0.0054 × 10
Here we have to do normal multiplication with shifting the decimal point by one place to the right
Therefore 0.0054 × 10 = 0.054

2. Find the product:
(i) 35.853 × 100
(ii) 42.5 × 100
(iii) 12.075 × 100
(iv) 100 × 0.005

Solution:
(i) Given 35.853 × 100

Here we have to do normal multiplication with shifting the decimal point by two places to the right
Therefore 35.853 × 100 = 3585.3

(ii) Given 42.5 × 100
Here we have to do normal multiplication with shifting the decimal point by two places to the right
Therefore 42.5 × 100 = 4250

(iii) Given 12.075 × 100
Here we have to do normal multiplication with shifting the decimal point by two places to the right
Therefore 12.075 × 100 = 1207.50

(iv) Given 100 × 0.005
Here we have to do normal multiplication with shifting the decimal point by two places to the right
Therefore 100 × 0.005 = 0.5

3. Find the product:
(i) 2.506 × 1000
(ii) 20.708 × 1000
(iii) 0.0529 × 1000
(iv) 1000 × 0.1

Solution:
(i) Given 2.506 × 1000
Here we have to do normal multiplication with shifting the decimal point by three places to the right
Therefore 2.506 × 1000 = 2506

(ii) Given 20.708 × 1000
Here we have to do normal multiplication with shifting the decimal point by three places to the right
Therefore 20.708 × 1000 = 20708

(iii) Given 0.0529 × 1000
Here we have to do normal multiplication with shifting the decimal point by three places to the right
Therefore 0.0529 × 1000 = 52.9

(iv) Given 1000 × 0.1
Here we have to do normal multiplication with shifting the decimal point by three places to the right
Therefore 1000 × 0.1 = 100

4. Find the product:
(i) 3.14 × 17
(ii) 0.745 × 12
(iii) 28.73 × 47
(iv) 0.0415 × 59

Solution:
(i) Given 3.14 × 17
First multiply as usual without looking at the decimal point
3.14 × 17 = 578
Now mark the decimal point in the product to have one place of decimal as there in the given decimal
3.14 × 17 = 57.8

(ii) Given 0.745 × 12
First multiply as usual without looking at the decimal point
0.745 × 12 = 894
Now mark the decimal point in the product to have three places of decimal as there in the given decimal
0.745 × 12 = 8.94

(iii) Given 28.73 × 47
First multiply as usual without looking at the decimal point
28.73 × 47 = 135031
Now mark the decimal point in the product to have two places of decimal as there in the given decimal
28.73 × 47 = 1350.31

(iv) Given 0.0415 × 59
First multiply as usual without looking at the decimal point
0.0415 × 59 = 24485
Now mark the decimal point in the product to have four places of decimal as there in the given decimal
0.0415 × 59 = 2.4485

5. Find:
(i) 1.07 × 0.02
(ii) 211.9 × 1.13
(iii) 10.05 × 1.05
(iv) 13.01 × 5.01

Solution:
(i) Given 1.07 × 0.02
First multiply as usual without looking at the decimal point
1.07 × 0.02 = 00214
Sum of the decimals is 4
Now mark the decimal point in the product to have four places of decimal as there in the given decimal
1.07 × 0.02 = 0.0214

(ii) Given 211.9 × 1.13
First multiply as usual without looking at the decimal point
211.9 × 1.13 = 239447
Sum of the decimals is 3
Now mark the decimal point in the product to have three places of decimal as there in the given decimal
211.9 × 1.13 = 239.447

(iii) Given 10.05 × 1.05
First multiply as usual without looking at the decimal point
10.05 × 1.05 = 105525
Sum of the decimals is 4
Now mark the decimal point in the product to have four places of decimal as there in the given decimal
10.05 × 1.05 = 10.5525

(iv) Given 13.01 × 5.01
First multiply as usual without looking at the decimal point
13.01 × 5.01 = 651801
Sum of the decimals is 4
Now mark the decimal point in the product to have four places of decimal as there in the given decimal
13.01 × 5.01 = 65.1801

6. Find the area of a rectangle whose length is 5.5m and breadth is 3.4m.

Solution:
Given length of rectangle = 5.5m
Breadth of rectangle = 3.4 m
Area of rectangle = length × breadth
= 5.5 × 3.4
= 18.7 m^2

7. If the cost of a book is Rs 25.57, find the cost 0f 24 such books.

Solution:
Given cost of a book is Rs 25.57
Cost of 24 books = 25.57 × 24
= Rs 618.00

8. A car covers a distance of 14.75km in one liter of petrol. How much distance it will cover in 15.5 liters of petrol?

Solution:
Given that distance covered by car in 1 liter of petrol = 14.75 km
Distance covered by car in 15.5 liters of petrol = 14.75 × 15.5
= 228.625 km

9. One kg of rice costs Rs 42.65. What will be the cost of 18.25 kg of rice?

Solution:
Given cost of 1kg of rice = 42.65
Cost of 18.25kg of rice = 42.65 × 18.25

= Rs 778.3625

10. One meter of cloth costs Rs 152.50. What is the cost of 10.75 meters of cloth?

Solution:
Given that cost of 1m cloth = Rs 152.50
Cost of 10.75 m of cloth = 152.50 × 10.75
= Rs 1639.375