Access answers to Maths NCERT Solutions for Class 7 Chapter 2 – Fractions and Decimals Exercise 2.7

1. Find:

(i) 0.4 ÷ 2

Solution:-

We have,

= (4/10) ÷ 2

Then,

= (4/10) × (1/2)

= (2/10) × (1/1)

= (2/10)

On dividing a decimal by 10, the decimal point is shifted to the left by one place.

Then,

= 0.2

(ii) 0.35 ÷ 5

Solution:-

We have,

= (35/100) ÷ 5

Then,

= (35/100) × (1/5)

= (7/100) × (1/1)

= (7/100)

On dividing a decimal by 100, the decimal point is shifted to the left by two places.

Then,

= 0.07

(iii) 2.48 ÷ 4

Solution:-

We have,

= (248/100) ÷ 4

Then,

= (248/100) × (1/4)

= (62/100) × (1/1)

= (62/100)

On dividing a decimal by 100, the decimal point is shifted to the left by two places.

Then,

= 0.62

(iv) 65.4 ÷ 6

Solution:-

We have,

= (654/10) ÷ 6

Then,

= (654/10) × (1/6)

= (109/10) × (1/1)

= (109/10)

On dividing a decimal by 10, the decimal point is shifted to the left by one place.

Then,

= 10.9

(v) 651.2 ÷ 4

Solution:-

We have,

= (6512/10) ÷ 4

Then,

= (6512/10) × (1/4)

= (1628/10) × (1/1)

= (1628/10)

On dividing a decimal by 10, the decimal point is shifted to the left by one place.

Then,

= 162.8

(vi) 14.49 ÷ 7

Solution:-

We have,

= (1449/100) ÷ 7

Then,

= (1449/100) × (1/7)

= (207/100) × (1/1)

= (207/100)

On dividing a decimal by 100, the decimal point is shifted to the left by two places.

Then,

= 2.07

(vii) 3.96 ÷ 4

Solution:-

We have,

= (396/100) ÷ 4

Then,

= (396/100) × (1/4)

= (99/100) × (1/1)

= (99/100)

On dividing a decimal by 100, the decimal point is shifted to the left by two places.

Then,

= 0.99

(viii) 0.80 ÷ 5

Solution:-

We have,

= (80/100) ÷ 5

Then,

= (80/100) × (1/5)

= (16/100) × (1/1)

= (16/100)

On dividing a decimal by 100, the decimal point is shifted to the left by two places.

Then,

= 0.16

2. Find:

(i) 4.8 ÷ 10

Solution:-

On dividing a decimal by 10, the decimal point is shifted to the left by one place.

We have,

= 4.8 ÷ 10

= (4.8/10)

= 0.48

(ii) 52.5 ÷ 10

Solution:-

On dividing a decimal by 10, the decimal point is shifted to the left by one place.

We have,

= 52.5 ÷ 10

= (52.5/10)

= 5.25

(iii) 0.7 ÷ 10

Solution:-

On dividing a decimal by 10, the decimal point is shifted to the left by one place.

We have,

= 0.7 ÷ 10

= (0.7/10)

= 0.07

(iv) 33.1 ÷ 10

Solution:-

On dividing a decimal by 10, the decimal point is shifted to the left by one place.

We have,

= 33.1 ÷ 10

= (33.1/10)

= 3.31

(v) 272.23 ÷ 10

Solution:-

On dividing a decimal by 10, the decimal point is shifted to the left by one place.

We have,

= 272.23 ÷ 10

= (272.23/10)
= 27.223

(vi) 0.56 ÷ 10
Solution:-
On dividing a decimal by 10, the decimal point is shifted to the left by one place.
We have,
= 0.56 ÷ 10
= (0.56/10)
= 0.056

(vii) 3.97 ÷10
Solution:-
On dividing a decimal by 10, the decimal point is shifted to the left by one place.
We have,
= 3.97 ÷ 10
= (3.97/10)
= 0.397
3. Find:
(i) 2.7 ÷ 100
Solution:-
On dividing a decimal by 100, the decimal point is shifted to the left by two places.
We have,
= 2.7 ÷ 100
= (2.7/100)
= 0.027
(ii) 0.3 ÷ 100
Solution:-
On dividing a decimal by 100, the decimal point is shifted to the left by two places.
We have,
= 0.3 ÷ 100
= (0.3/100)
= 0.003
(iii) 0.78 ÷ 100
Solution:-
On dividing a decimal by 100, the decimal point is shifted to the left by two places.
We have,
= 0.78 ÷ 100
= (0.78/100)
= 0.0078
(iv) 432.6 ÷ 100
Solution:-

On dividing a decimal by 100, the decimal point is shifted to the left by two places.

We have,

= 432.6 ÷ 100

= (432.6/100)

= 4.326

(v) 23.6 ÷100

Solution:-

On dividing a decimal by 100, the decimal point is shifted to the left by two places.

We have,

= 23.6 ÷ 100

= (23.6/100)

= 0.236

(vi) 98.53 ÷ 100

Solution:-

On dividing a decimal by 100, the decimal point is shifted to the left by two places.

We have,

= 98.53 ÷ 100

= (98.53/100)

= 0.9853

4. Find:

(i) 7.9 ÷ 1000

Solution:-

On dividing a decimal by 1000, the decimal point is shifted to the left by three places.

We have,

= 7.9 ÷ 1000

= (7.9/1000)

= 0.0079

(ii) 26.3 ÷ 1000

Solution:-

On dividing a decimal by 1000, the decimal point is shifted to the left by three places.

We have,

= 26.3 ÷ 1000

= (26.3/1000)

= 0.0263

(iii) 38.53 ÷ 1000

Solution:-

On dividing a decimal by 1000, the decimal point is shifted to the left by three places.

We have,

= 38.53 ÷ 1000

= (38.53/1000)
= 0.03853

(iv) 128.9 ÷ 1000
Solution:-
On dividing a decimal by 1000, the decimal point is shifted to the left by three places.
We have,
= 128.9 ÷ 1000
= (128.9/1000)
= 0.1289

(v) 0.5 ÷ 1000
Solution:-
On dividing a decimal by 1000, the decimal point is shifted to the left by three places.
We have,
= 0.5 ÷ 1000
= (0.5/1000)
= 0.0005

5. Find:
(i) 7 ÷ 3.5
Solution:-
We have,
= 7 ÷ (35/10)
= 7 × (10/35)
= 1 × (10/5)
= 2
(ii) 36 ÷ 0.2
Solution:-
We have,
= 36 ÷ (2/10)
= 36 × (10/2)
= 18 × 10
= 180
(iii) 3.25 ÷ 0.5
Solution:-
We have,
= (325/100) ÷ (5/10)
= (325/100) × (10/5)
= (325 × 10)/ (100 × 5)
= (65 × 1)/ (10 × 1)
= 65/10

= 6.5

(iv) 30.94 ÷ 0.7

Solution:-

We have,

= (3094/100) ÷ (7/10)

= (3094/100) × (10/7)

= (3094 × 10)/ (100 × 7)

= (442 × 1)/ (10 × 1)

= 442/10

= 44.2

(v) 0.5 ÷ 0.25

Solution:-

We have,

= (5/10) ÷ (25/100)

= (5/10) × (100/25)

= (5 × 100)/ (10 × 25)

= (1 × 10)/ (1 × 5)

= 10/5

= 2

(vi) 7.75 ÷ 0.25

Solution:-

We have,

= (775/100) ÷ (25/100)

= (775/100) × (100/25)

= (775 × 100)/ (100 × 25)

= (155 × 1)/ (1 × 5)

= (31 × 1)/ (1 × 1)

= 31

(vii) 76.5 ÷ 0.15

Solution:-

We have,

= (765/10) ÷ (15/100)

= (765/10) × (100/15)

= (765 × 100)/ (10 × 15)

= (51 × 10)/ (1 × 1)

= 510

(viii) 37.8 ÷ 1.4

Solution:-

We have,

= (378/10) ÷ (14/10)

= (378/10) × (10/14)

= (378 × 10)/ (10 × 14)

= (27 × 1)/ (1 × 1)

= 27

(ix) 2.73 ÷ 1.3

Solution:-

We have,

= (273/100) ÷ (13/10)

= (273/100) × (10/13)

= (273 × 10)/ (100 × 13)

= (21 × 1)/ (10 × 1)

= 21/10

= 2.1

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?

Solution:-

From the question, it is given that,

Total distance covered by vehicle in 2.4 litres of petrol = 43.2 km

Then,

Distance covered in 1 litre of petrol = 43.2 ÷ 2.4

= (432/10) ÷ (24/10)

= (432/10) × (10/24)

= (432 × 10)/ (10 × 24)

= (36 × 1)/ (1 × 2)

= (18 × 1)/ (1 × 1)

= 18 km

∴Total distance covered in 1 liter of petrol is 18 km.