

**NCERT SOLUTIONS FOR CLASS 7 MATHEMATICS | FRACTIONS & DECIMALS |
EXERCISE 2.7**

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) $14.49 \div 7$

vii) $3.96 \div 4$

viii) $0.80 \div 5$

Answer:

$$\text{i) } 0.4 \div 2 = \frac{4}{10} \div 2 = \frac{4}{10} \times \frac{1}{2} = \frac{4}{20} = \frac{2}{10} = 0.2$$

$$\text{ii) } 0.35 \div 5 = \frac{35}{100} \div 5 = \frac{35}{100} \times \frac{1}{5} = \frac{7}{100} = 0.07$$

$$\text{iii) } 2.48 \div 4 = \frac{248}{100} \div 4 = \frac{248}{100} \times \frac{1}{4} = \frac{62}{100} = 0.62$$

$$\text{iv) } 65.4 \div 6 = \frac{654}{10} \div 6 = \frac{654}{10} \times \frac{1}{6} = \frac{109}{10} = 10.9$$

$$\text{v) } 651.2 \div 4 = \frac{6512}{10} \div 4 = \frac{6512}{10} \times \frac{1}{4} = \frac{1628}{10} = 162.8$$

$$\text{vi) } 14.49 \div 7 = \frac{1449}{100} \div 7 = \frac{1449}{100} \times \frac{1}{7} = \frac{207}{100} = 2.07$$

$$\text{vii) } 3.96 \div 4 = \frac{396}{100} \div 4 = \frac{396}{100} \times \frac{1}{4} = \frac{99}{100} = 0.99$$

$$\text{viii) } 0.80 \div 5 = \frac{80}{100} \div 5 = \frac{80}{100} \times \frac{1}{5} = \frac{16}{100} = 0.16$$

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) $0.56 \div 10$

vii) $3.97 \div 10$

Answer:

While dividing a number by 10, 100 or 1000, the digits of the number and the quotient are same but the decimal point in the quotient shifts to the left by as many places as there are zeros over one.

i) 0.48

ii) 5.25

iii) 0.07

iv) 3.31

v) 27.223

vi) 0.056

vii) 0.397

3. Find

i) $2.7 \div 100$

ii) $0.3 \div 100$

iii) $0.78 \div 100$

iv) $432.6 \div 100$

v) $23.6 \div 100$

vi) $98.53 \div 100$

Answer:

i) 0.027

ii) 0.003

iii) 0.0078

iv) 4.326

v) 0.236

vi) 0.9853

4.Find:

i) $7.9 \div 1000$

ii) $26.3 \div 1000$

iii) $38.53 \div 1000$

iv) $128.9 \div 1000$

v) $0.5 \div 1000$

Answer;

i) 0.0079

ii) 0.0263

iii) 0.03853

iv) 0.1289

v) 0.0005

5. Find:

i) $7 \div 3.5$

ii) $36 \div 0.2$

iii) $3.25 \div 0.5$

iv) $30.94 \div 0.7$

v) $0.5 \div 0.25$

vi) $7.75 \div 0.25$

vii) $76.5 \div 0.15$

viii) $37.8 \div 1.4$

ix) $2.73 \div 1.3$

Answer:

$$\text{i) } 7 \div 3.5 = \frac{7}{3.5} \times \frac{10}{10} = \frac{70}{35} = 2$$

$$\text{ii) } 36 \div 0.2 = \frac{36}{0.2} \times \frac{10}{10} = \frac{360}{2} = 180$$

$$\text{iii) } 3.25 \div 0.5 = \frac{3.25}{0.5} \times \frac{100}{100} = \frac{325}{50} = 6.5$$

$$\text{iv) } 30.94 \div 0.7 = \frac{30.94}{0.7} \times \frac{100}{100} = \frac{3094}{70} = 44.2$$

$$\text{v) } 0.5 \div 0.25 = \frac{0.5}{0.25} \times \frac{100}{100} = \frac{50}{25} = 2$$

$$\text{vi) } 7.75 \div 0.25 = \frac{7.75}{0.25} \times \frac{100}{100} = \frac{775}{25} = 31$$

$$\text{vii) } 76.5 \div 0.15 = \frac{76.5}{0.15} \times \frac{100}{100} = \frac{7650}{15} = 510$$

$$\text{viii) } 37.8 \div 1.4 = \frac{37.8}{1.4} \times \frac{10}{10} = \frac{378}{14} = 27$$

$$\text{ix) } 2.73 \div 1.3 = \frac{2.73}{1.3} \times \frac{100}{100} = \frac{273}{130} = 2.1$$

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?

Answer:

Distance covered by a vehicle in 2.4 litres of petrol = 43.2 km

$$\text{Distance covered in one litre of petrol} = 43.2 \div 2.4 = \frac{43.2}{2.4} \times \frac{10}{10} = \frac{432}{24} = 18 \text{ km}$$
