

Key answer

Worksheet (4) | Lower Secondary

Stage (6-8)

Name:

Subject: math

Date: / /

Class: Grade 6

Objectives:

- Add and subtract decimal numbers

Dividing a decimal by a whole number

Dividing a Decimal by a Decimal

Dividing a Whole Number by a Decimal

→ Is the divisor a whole number?



Exercise (1) : Evaluate the following :

1 $2.4 \div 8$

= 0.3

$$\begin{array}{r} \times 0.3 \\ 8 \overline{) 2.4} \\ \underline{-0} \\ 24 \\ \underline{24} \\ 0 \end{array}$$

2 $0.24 \div 8 = 0.03$

or

$$\begin{array}{r} 0.03 \\ 8 \overline{) 0.24} \\ \underline{24} \\ 0 \end{array}$$

$$\begin{array}{r} 0.03 \\ 8 \overline{) 0.24} \\ \underline{0} \\ 02 \\ \underline{0} \\ 24 \\ \underline{24} \\ 0 \end{array}$$

3 $4.2 \div 7 = 0.6$

$$\begin{array}{r} 0.6 \\ 7 \overline{)4.2} \\ \underline{-0} \\ 42 \\ \underline{-42} \\ 0 \end{array}$$

4 $0.42 \div 7 = 0.06$

$$\begin{array}{r} 0.06 \\ 7 \overline{)0.42} \\ \underline{-42} \\ 0 \end{array}$$

5 $0.042 \div 7 = 0.006$

$$\begin{array}{r} 0.006 \\ 7 \overline{)0.042} \\ \underline{-42} \\ 0 \end{array}$$

6 $4.35 \div 3$

$= 1.45$

$$\begin{array}{r} 1.45 \\ 3 \overline{)4.35} \\ \underline{-3} \\ 13 \\ \underline{-12} \\ 15 \\ \underline{-15} \\ 0 \end{array}$$

7 $7.9 \div 4$

$= 1.675$

$$\begin{array}{r} 1.675 \\ 4 \overline{)7.900} \\ \underline{-4} \\ 39 \\ \underline{-36} \\ 30 \\ \underline{-28} \\ 20 \\ \underline{-20} \\ 0 \end{array}$$

8 $93 \div 6$

$= 15.5$

$$\begin{array}{r} 15.5 \\ 6 \overline{)93.0} \\ \underline{-6} \\ 33 \\ \underline{-30} \\ 30 \\ \underline{-30} \\ 0 \end{array}$$

9 $58 \div 4$

$= 14.5$

$$\begin{array}{r} 14.5 \\ 4 \overline{)58.0} \\ \underline{-4} \\ 18 \\ \underline{-16} \\ 20 \\ \underline{-20} \\ 0 \end{array}$$

10 $0.637 \div 7$

$= 0.091$

$$\begin{array}{r} 0.091 \\ 7 \overline{)0.637} \\ \underline{-63} \\ 07 \\ \underline{-7} \\ 0 \end{array}$$

11 $0.426 \div 6$

$= 0.071$

$$\begin{array}{r} 0.071 \\ 6 \overline{)0.426} \\ \underline{-42} \\ 06 \\ \underline{-6} \\ 0 \end{array}$$

Exercise (2) : Evaluate the following :

1) $0.506 \div 0.08 = 50.6 \div 8 =$

$\frac{0.506 \times 100}{0.08 \times 100} = \frac{50.6}{8} = \boxed{6.325}$

$$\begin{array}{r} 6.325 \\ 8 \overline{) 50.600} \\ \underline{48} \\ 26 \\ \underline{-24} \\ 20 \\ \underline{16} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

2) $32 \div 0.2 = \boxed{160}$

$\frac{32 \times 10}{0.2 \times 10} = \frac{320}{2} =$

$$\begin{array}{r} \times 160 \\ 2 \overline{) 320} \\ \underline{2} \\ 12 \\ \underline{12} \\ 0 \end{array}$$

3) $7.1052 \div 0.006 = 7105.2 \div 6$

$\frac{7.1052 \times 1000}{0.006 \times 1000} = \frac{7105.2}{6} = \boxed{1174.2}$

$$\begin{array}{r} 1174.2 \\ 6 \overline{) 7105.2} \\ \underline{-6} \\ 11 \\ \underline{6} \\ 50 \\ \underline{48} \\ 25 \\ \underline{24} \\ 0 \end{array}$$

4) $6.5 \div 2 = \boxed{3.25}$

$$\begin{array}{r} 3.25 \\ 2 \overline{) 6.50} \\ \underline{6} \\ 05 \\ \underline{-4} \\ 10 \\ \underline{10} \\ 0 \end{array}$$

5) $6.5 \div 0.2 =$

$$\begin{array}{r} 32.5 \\ 2 \overline{) 65.0} \\ \underline{6} \\ 05 \\ \underline{-4} \\ 10 \\ \underline{10} \\ 0 \end{array}$$

6) $6.5 \div 0.02 = \frac{650}{2} =$

$\frac{6.5 \times 100}{0.02 \times 100} = \frac{650}{2} = \boxed{325}$

$$\begin{array}{r} 325 \\ 2 \overline{) 650} \\ \underline{6} \\ 05 \\ \underline{-4} \\ 10 \\ \underline{10} \\ 0 \end{array}$$

Exercise (3): choose the correct answer :

1) $0.072 \div 0.03 =$

- a) 24 b) 0.024
 c) 0.24 d) 2.4

2) $5.6 \div 8 =$

- a) 0.007 b) 0.07
 c) 0.7 d) 7

3) $13.68 \div 0.8 =$

- a) 1.71 b) 17.1
 c) 0.171 d) 171

①
$$\begin{array}{r} \times 2 \quad \underline{4} \\ 3 \overline{) 7.2} \\ \underline{-6} \\ 12 \\ \underline{-12} \\ 0 \end{array}$$

$$\begin{array}{r} \underline{0.7} \\ 8 \overline{) 5.6} \\ \underline{56} \\ 0 \end{array}$$

③
$$\begin{array}{r} \underline{017.1} \\ 8 \overline{) 136.8} \\ \underline{8} \\ 56 \\ \underline{56} \\ 08 \\ \underline{-8} \\ 0 \end{array}$$



Dividing decimals is similar to dividing whole numbers, except you have to handle the decimal point before you start dividing. Here's how to divide decimals step by step:

1 Move the decimal point in the divisor and dividend.

Turn the *divisor* (the number you're dividing by) into a whole number by moving the decimal point all the way to the right. At the same time, move the decimal point in the *dividend* (the number you're dividing) the same number of places to the right.

2 Place a decimal point in the *quotient* (the answer) directly above where the decimal point now appears in the dividend.

3 Divide as usual, being careful to line up the quotient properly so that the decimal point falls into place.

Line up each digit in the quotient just over the last digit in the dividend used in that cycle.

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