

Lesson 8 Reteach

Divide Decimals by Decimals

When you divide a decimal by a decimal multiply both the divisor and the dividend by the same power of ten. Then divide as with whole numbers.

Example 1

Find $10.14 \div 5.2$.

Estimate: $10 \div 5 = 2$

Multiply by 10 to make a whole number.

$$\begin{array}{r} 5.2 \overline{)10.14} \end{array}$$

$$\begin{array}{r} 1.95 \\ 52 \overline{)101.40} \\ \underline{-52} \\ 494 \\ \underline{-468} \\ 260 \\ \underline{-260} \\ 0 \end{array}$$

Place the decimal point.
Divide as with whole numbers.

Annex a zero to continue.

Compare the quotient with the estimate.

10.14 divided by 5.2 is 1.95.

Check $1.95 \times 5.2 = 10.14 \checkmark$

Example 2

Find $4.09 \div 0.02$.

$$\begin{array}{r} 0.02 \overline{)4.09} \end{array}$$

$$\begin{array}{r} 204.5 \\ 2 \overline{)409.0} \\ \underline{-4} \\ 00 \\ \underline{-0} \\ 09 \\ \underline{-8} \\ 10 \\ \underline{-10} \\ 0 \end{array}$$

Place the decimal point.
Divide.

Write a zero in the dividend and continue to divide.

4.09 divided by 0.02 is 204.5.

Check $204.5 \times 0.02 = 4.09 \checkmark$

Exercises

Divide.

1. $9.8 \div 1.4$

2. $4.41 \div 2.1$

3. $16.848 \div 0.72$

4. $8.652 \div 1.2$

5. $0.5 \div 0.001$

6. $9.594 \div 0.06$