

# 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.

$$\begin{array}{r}
 5.2 \overline{)10.14} \longrightarrow 52 \overline{)101.40} \\
 \underline{-52} \phantom{00} \\
 494 \\
 \underline{-468} \\
 260 \\
 \underline{-260} \\
 0
 \end{array}$$

Multiply by the same number, 10.

Place the decimal point.  
Divide as with whole numbers.

Annex a zero to continue.

10.14 divided by 5.2 is 1.95.

Compare the quotient with the estimate.

**Check**  $1.95 \times 5.2 = 10.14 \checkmark$

**Example 2** Find  $4.09 \div 0.02$ .

$$\begin{array}{r}
 0.02 \overline{)4.09} \longrightarrow 2 \overline{)409.0} \\
 \underline{-4} \phantom{00} \\
 00 \\
 \underline{-0} \\
 09 \\
 \underline{-8} \\
 10 \\
 \underline{-10} \\
 0
 \end{array}$$

Multiply each by 100.

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.  $9.594 \div 0.06$