Name_____
Date_____Period_____

Multiplying and Dividing Decimals

Multiplying rules:

1. When multiplying decimals you ignore the decimal point, and multiply as whole numbers.
2. The number of digits to the right of the decimal point in your answer should match the total number of digits to the right of the decimal point(s) in the problem.

Dividing rules:

$$\text{Divisor}\overline{)\text{Dividend}}\quad \text{Quotient}$$

1. You can't have a decimal point in the divisor.
2. You must move the decimal point to the right in the divisor until it is a whole number.
3. Move the decimal point in the dividend an equal number of times.
4. Bring the decimal point straight up into the quotient and then divide as whole numbers.

Solve Together.

A. 0.6×3.23

$$\begin{array}{r} {\scriptstyle 1\,1} \\ 323 \\ \times\ 6 \\ \hline 1.938 \end{array}$$

B. 8×4.5

$$\begin{array}{r} {\scriptstyle 4} \\ 45 \\ \times\ 8 \\ \hline 36.0 \end{array}$$

You Try

1. 2.47×7

$$\begin{array}{r} {\scriptstyle 3\,4} \\ 247 \\ \times\ 7 \\ \hline 17.29 \end{array}$$

2. 8.4×7.6

$$\begin{array}{r} {\scriptstyle 2} \\ 84 \\ \times 76 \\ \hline 504 \\ +5880 \\ \hline 63.84 \end{array}$$

3. 8.5×6.1

$$\begin{array}{r} {\scriptstyle 3}\\ 85\\ \times 61\\ \hline 85\\ 5100\\ \hline 51.85 \end{array}$$

4. 3.6×0.79

$$\begin{array}{r} {\scriptstyle 4}\\ 36\\ \times 79\\ \hline 324\\ 2520\\ \hline 2844 \end{array}$$

Solve Together

A. $9.9 \div 0.9$

$0.9\overline{)9.9}$ $\quad 9\overline{)99}$ $\quad 11$

B. $3.9 \div 7.5$

$7.5\overline{)3.9}$

$$\begin{array}{r} {\scriptstyle 2}\\ 75\overline{)39.00} \quad .52\\ -375\downarrow\\ \hline 150\\ -150\\ \hline 0 \end{array}$$

You Try

1. $1.8 \div 5$

$$\begin{array}{r} .36\\ 5\overline{)1.80}\\ -15\downarrow\\ \hline 30 \end{array}$$

2. $1.6 \div 0.2$

$0.2\overline{)1.6}$ $\quad 2\overline{)16}$ $\quad 8$

3. $1 \div 4$

$$\begin{array}{r} .25\\ 4\overline{)1.00}\\ -8\downarrow\\ \hline 20\\ -20\\ \hline 0 \end{array}$$

4. $2.5 \div 5$

$5\overline{)2.5}$ $\quad .5$