



Name _____

Dividing by Whole Numbers

R 2-4

When dividing by whole numbers and decimals, begin by estimating the quotient. Then divide.

Divide: $37.8 \div 15$

Estimate using compatible numbers: $30 \div 15 = 2$. The quotient will be close to 2.

Step 1

Use your estimate to help you place the decimal point and the first digit in the quotient. Then divide.

$$\begin{array}{r} 2. \\ 15 \overline{)37.8} \\ - 30 \\ \hline 7 \end{array}$$

Divide $37 \div 15$.

Multiply 15×2 .

Subtract $37 - 30$.

Compare $7 < 15$.

Step 2

Divide the tenths.

$$\begin{array}{r} 2.5 \\ 15 \overline{)37.8} \\ - 30 \\ \hline 78 \\ - 75 \\ \hline 3 \end{array}$$

Bring down the 8.

Divide $78 \div 15$.

Multiply 15×5 .

Subtract $78 - 75$.

Compare $3 < 15$.

Step 3

Place a zero in the hundredths place of the dividend. Then divide.

$$\begin{array}{r} 2.52 \\ 15 \overline{)37.80} \\ - 30 \\ \hline 78 \\ - 75 \\ \hline 30 \\ - 30 \\ \hline 0 \end{array}$$

Bring down the 0.

Divide $30 \div 15$.

Multiply 15×2 .

Subtract $30 - 30$.

Step 4

Check by multiplying.

$$\begin{array}{r} 2.52 \\ \times 15 \\ \hline 1260 \\ 252 \\ \hline 37.80 \end{array}$$

Check your answer by multiplying: $15 \times 2.52 = 37.8$. The answer checks.

1.

$$\begin{array}{r} 9 \\ 6 \overline{)576} \\ - \\ \hline 36 \\ - \\ \hline 0 \end{array}$$

2.

$$\begin{array}{r} 2. \\ 8 \overline{)17.28} \\ - \\ \hline 1.2 \\ - \\ \hline \end{array}$$

3.

$$69 \overline{)3,243}$$

4.

$$31 \overline{)232.5}$$

5.

$$17 \overline{)1,428}$$