

Divide Decimals by Whole Numbers

Divide. $19.61 \div 37$

Step 1 Estimate the quotient.

2,000 hundredths $\div 40 = \underline{50}$ hundredths, or 0.50. So, the quotient will have a zero in the ones place.

$$\begin{array}{r} 0 \\ 17 \overline{)19.61} \end{array}$$

Step 2 Divide the tenths.

Use the estimate. Try 5 in the tenths place.

Multiply. $\underline{5} \times 37 = \underline{185}$

$$\begin{array}{r} 0.5 \\ 17 \overline{)19.61} \\ - 18.5 \\ \hline 1.1 \end{array}$$

Subtract. $196 - \underline{185} = \underline{11}$

Check. $\underline{11} < 37$

Step 3 Divide the hundredths.

Estimate: 120 hundredths $\div 40 = 3$ hundredths.

Multiply. $\underline{3} \times 37 = \underline{111}$

$$\begin{array}{r} 0.53 \\ 17 \overline{)19.61} \\ - 18.5 \\ \hline 1.11 \\ - 1.11 \\ \hline 0 \end{array}$$

Subtract. $\underline{111} - \underline{111} = \underline{0}$

Check. $\underline{0} < 37$

Place the decimal point in the quotient.

So, $19.61 \div 37 = \underline{0.53}$.

Write the quotient with the decimal point placed correctly.

1 $5.94 \div 3 = 198$ _____

2 $48.3 \div 23 = 21$ _____

Divide.

3 $9 \overline{)61.2}$

4 $17 \overline{)83.3}$

5 $9 \overline{)7.38}$