

Reteaching Page

3.7 Dividing Decimals by Whole Numbers**Method 1**

Dividing Decimals by Whole Numbers is all about keeping your **places of value** in proper lines.

$$37.95 \div 5 =$$

- Step 1** – Bring the Decimal **straight up** into the Quotient
- Step 2** – Divide Normally (make sure to keep your places of value in line.)
- Step 3** – Add 0's if necessary

$$37.95 \div 5$$

$$\begin{array}{r} 5.59 \\ 5 \overline{)37.95} \\ \underline{35} \\ 29 \\ \underline{29} \\ 45 \\ \underline{45} \\ 0 \end{array}$$

$$237.6 \div 33$$

$$\begin{array}{r} 7.2 \\ 33 \overline{)237.6} \\ \underline{231} \\ 66 \\ \underline{66} \\ 0 \end{array}$$

$$10.35 \div 3$$

$$\begin{array}{r} 3.45 \\ 3 \overline{)10.35} \\ \underline{9} \\ 13 \\ \underline{12} \\ 15 \\ \underline{15} \\ 0 \end{array}$$

$$25 \div 4$$

$$\begin{array}{r} 6.25 \\ 4 \overline{)25.00} \\ \underline{24} \\ 10 \\ \underline{8} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

Notice that I added two 0's to find the quotient.

Method 2

The quotient will have the **same number of decimal places** as the dividend.

- Step 1** – Count the decimal places in the dividend - **record**
- Step 2** – Divide Normally
- Step 3** – Add 0's if necessary (you must add decimal places to your record)
- Step 4** – Put the decimal places back into the quotient.

$$23.25 \div 15 \quad ^2$$

$$\begin{array}{r} 465 \\ 5 \overline{)2325} \\ \underline{20} \\ 32 \\ \underline{30} \\ 25 \\ \underline{25} \\ 0 \end{array}$$

4.65

$$8.832 \div 32 \quad ^3$$

$$\begin{array}{r} 276 \\ 32 \overline{)8832} \\ \underline{64} \\ 243 \\ \underline{224} \\ 192 \\ \underline{192} \\ 0 \end{array}$$

0.276

$$78.3 \div 5 \quad ^1$$

$$\begin{array}{r} 1566 \\ 5 \overline{)7830} \\ \underline{5} \\ 28 \\ \underline{25} \\ 33 \\ \underline{30} \\ 30 \\ \underline{30} \\ 0 \end{array}$$

15.66

$$7.5 \div 2 \quad ^1$$

$$\begin{array}{r} 375 \\ 2 \overline{)750} \\ \underline{6} \\ 15 \\ \underline{14} \\ 10 \\ \underline{10} \\ 0 \end{array}$$

3.75

Notice that I added a 0 and a decimal place to find the quotient.

Practice

_____ 1) $38.5 \div 5 =$

_____ 3) $20.4 \div 3 =$

_____ 2) $4.8 \div 100 =$

_____ 4) $7.32 \div 6 =$