

## Reteaching Page

### 3.8 Dividing with Decimal Divisors

You can not divide by a fraction! When the divisor is a decimal, it must be changed into a whole number. Simply use **the powers of 10** to change the divisor to a whole number. Then multiply the dividend by the **same power of 10** to keep the problem balanced.

$$6.496 \div 0.32 =$$

$$0.32 * 100 = 32$$

**Step 1** – Use **the powers of 10** to change the divisor into a whole number.

$$6.496 * 100 = 649.6$$

**Step 2** – Multiply the dividend by the **same power of 10**.

$$6496 \div 32 =$$

**Step 3** – Divide Normally

$$91.8 \div 5.4$$

$$4 \div 0.08$$

$$72.5 \div 0.2$$

$$\begin{array}{r} 20.3 \\ 32 \overline{)649.6} \\ \underline{64} \phantom{0} \\ 09 \phantom{0} \\ \underline{00} \phantom{0} \\ 96 \phantom{0} \\ \underline{96} \\ 0 \end{array}$$

$$\begin{array}{r} 17 \\ 54 \overline{)918} \\ \underline{54} \phantom{0} \\ 378 \\ \underline{378} \\ 0 \end{array}$$

$$\begin{array}{r} 50 \\ 8 \overline{)400} \\ \underline{40} \phantom{0} \\ 00 \\ \underline{00} \\ 0 \end{array}$$

$$\begin{array}{r} 362.5 \\ 2 \overline{)725.0} \\ \underline{6} \phantom{0} \\ 12 \phantom{0} \\ \underline{12} \phantom{0} \\ 5 \phantom{0} \\ \underline{4} \phantom{0} \\ 10 \phantom{0} \\ \underline{10} \\ 0 \end{array}$$

Notice that I added a 0 to find the quotient.

**Practice rewriting the division problem without a decimal in the divisor.**

\_\_\_\_\_ 1)  $6.497 \div 8.9 =$

\_\_\_\_\_ 2)  $0.85 \div 0.01 =$

\_\_\_\_\_ 3)  $0.004 \div 0.2 =$

\_\_\_\_\_ 4)  $24.03 \div 0.3 =$

**Rewrite each division problem without a decimal in the divisor, then divide.**

\_\_\_\_\_ 5)  $4.32 \div 0.24 =$

\_\_\_\_\_ 6)  $56.1 \div 3.4 =$

\_\_\_\_\_ 7)  $167.4 \div 6.2 =$

\_\_\_\_\_ 8)  $4.06 \div 3.5 =$