

2.6 Dividing Decimals

EQ: How do you divide decimals? How is it similar to dividing whole numbers?

$$\begin{array}{r} 1.83 \leftarrow \text{quotient} \\ \hline \text{Divisor} \rightarrow 4 \overline{) 7.32} \leftarrow \text{Dividend} \end{array}$$

A has to be a whole number

★ Move the decimal to the right on both the divisor AND dividend to make a whole number.

$$\cdot 12 \overline{) 2460}$$

★ you move the decimals 2x to get a whole number

Example 1: $7.6 \div 4 = 1.9$

$$\begin{array}{r} 4 \overline{) 7.6} \\ \underline{4} \\ 36 \\ \underline{-36} \\ 0 \end{array}$$

$= 1.9$

Example 2: $0.273 \div 0.39$

$$\cdot 39 \overline{) 0.273}$$

$$\begin{array}{r} \times \times 0.7 \\ 39 \overline{) 27.3} \\ \underline{273} \\ 000 \end{array}$$

$= 0.7$

Example 3: $2.45 \div 0.007$

$$\cdot 007 \overline{) 2.450}$$

$$\begin{array}{r} \times 350. \\ 7 \overline{) 2450.} \\ \underline{-21} \\ 350 \\ \underline{-350} \\ 0 \end{array}$$

$= 350$