

2.6 DIVIDING DECIMALS

ESSENTIAL QUESTION:

How do you divide decimals?

EXAMPLE 1

Divide.

1) $7.6 \div 4$

$$\begin{array}{r} 1.9 \\ 4 \overline{) 7.6} \\ \underline{-4} \\ 36 \\ \underline{-36} \\ 0 \end{array}$$

2) $4.38 \div 12$

$$\begin{array}{r} .365 \\ 12 \overline{) 4.380} \\ \underline{-36} \\ 78 \\ \underline{-72} \\ 60 \\ \underline{-60} \\ 0 \end{array}$$

ON YOUR OWN

Divide.

1) $36.4 \div 2$

$$\begin{array}{r} 18.2 \\ 2 \overline{) 36.4} \\ \underline{-2} \\ 16 \\ \underline{-16} \\ 04 \\ \underline{-4} \\ 0 \end{array}$$

2) $22.2 \div 6$

$$\begin{array}{r} 3.7 \\ 6 \overline{) 22.2} \\ \underline{-18} \\ 42 \\ \underline{-42} \\ 0 \end{array}$$

3) $59.64 \div 7$

$$\begin{array}{r} 8.52 \\ 7 \overline{) 59.64} \\ \underline{-56} \\ 36 \\ \underline{-35} \\ 14 \\ \underline{-14} \\ 0 \end{array}$$

4) $43.26 \div 14$

$$\begin{array}{r} 3.09 \\ 14 \overline{) 43.26} \\ \underline{-42} \\ 12 \\ \underline{-0} \\ 126 \\ \underline{-126} \\ 0 \end{array}$$

5) $6.2 \div 4$

$$\begin{array}{r} 1.55 \\ 4 \overline{) 6.20} \\ \underline{-4} \\ 22 \\ \underline{-20} \\ 20 \\ \underline{-20} \\ 0 \end{array}$$

6) $3.12 \div 16$

$$\begin{array}{r} .195 \\ 16 \overline{) 3.120} \\ \underline{-16} \\ 152 \\ \underline{-144} \\ 80 \\ \underline{-80} \\ 0 \end{array}$$

Dividing Decimals by Whole Numbers

1) Place the decimal point in the quotient above the decimal point in the dividend.

2) Then divide as you would with whole numbers.

3) If there is a remainder write zeros in the dividend as needed and divide until there is no remainder.