

7th Grade Lesson 74

- I can solve a fractional-part-of-a-number problem when the total is unknown.

What fraction of 56 is 42?

divide by
56

$$\frac{W_f \cdot 56}{56} = \frac{42}{56}$$

$$W_f = \frac{3}{4}$$

What decimal part of 56 is 42?

divide by
56

$$\frac{W_d \cdot 56}{56} = \frac{42}{56}$$

$$W_d = 0.75$$

Seventy-five is what decimal part of 20?

$$\begin{array}{l} \text{divide by} \\ 20 \end{array} \quad \begin{array}{r} 75 \\ \hline 20 \end{array} \Bigg| = \Bigg| \begin{array}{r} W_d \cdot 20 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 3.75 \\ \hline \end{array} \Bigg| = \Bigg| W_d$$

Seventy-five is what fractional part of 20?

$$\begin{array}{l} \text{divide by} \\ 20 \end{array} \quad \begin{array}{r} 75 \\ \hline 20 \end{array} \Bigg| = \Bigg| \begin{array}{r} W_f \cdot 20 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 15 \\ \hline 4 \end{array} \Bigg| = \Bigg| W_f$$

Three fourths of what number is 60?

$$\begin{array}{l} \text{multiply} \\ \text{by } \frac{4}{3} \end{array} \quad \begin{array}{r} \cancel{\frac{4}{3}} \cdot \cancel{\frac{3}{4}} \cdot W_n \\ \hline W_n \end{array} \Bigg| = \Bigg| \begin{array}{r} \cancel{60} \cdot \frac{4}{\cancel{3}} \\ \hline 1 \end{array}$$

$$\begin{array}{r} W_n \\ \hline \end{array} \Bigg| = \Bigg| 80$$

Seventy-five hundredths of what number is 60?

$$\begin{array}{l} \text{divide} \\ \text{by } 0.75 \end{array} \quad \begin{array}{r} 0.75 \cdot W_n \\ \hline 0.75 \end{array} \Bigg| = \Bigg| \begin{array}{r} 60 \\ \hline 0.75 \end{array}$$

$$\begin{array}{r} W_n \\ \hline \end{array} \Bigg| = \Bigg| 80$$

What fraction of 130 is 80?

$$Wf \cdot 130 = 80$$

Eighty is 0.4 of what number?

$$80 = .4 \cdot Wn$$

What decimal part of 80 is 60?

$$Wd \cdot 80 = 60$$

Six fifths of what number is 60?

$$\frac{6}{5} \cdot Wn = 60$$

Assignment

Problem Set 74

***A/B Optional:** #2-4, 7-14, 17, 20-24, 27-28