

7th Grade Lesson 77

- I can translate percent-of-a-number problems into equations and then solve the equations.

What percent of 40 is 25?

$$\frac{W_p \cdot 40}{40} = \frac{25}{40}$$

$$W_p = \frac{5}{8}$$

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$$\frac{5}{8} \cdot \frac{25}{100} = \frac{125}{2} = 62\frac{1}{2}\%$$

What percent of \$3.50 is \$0.28?

$$\frac{W_p \cdot \cancel{3.50}}{\cancel{3.50}} = \frac{0.28}{3.50}$$

$$W_p = 0.08$$

$$0.08 \cdot 100 = 8\%$$

Seventy-five percent of what number is 600?

$$75\% \cdot W_n = 600$$

$$\frac{\cancel{4}}{8} \cdot \frac{\cancel{3}}{4} \cdot W_n = \frac{600}{1} \cdot \frac{4}{3}$$

$$W_n = 800$$

Fifty is what percent of 40?

$$\frac{50}{40} = \frac{Wp \cdot 40}{40}$$

$$\frac{5}{4} = Wp$$

$$\frac{5}{4} \cdot \frac{100}{1} = 125\%$$

Sixty is 150% of what number?

$$\frac{60}{1.5} = \frac{1.5 \cdot Wn}{1.5}$$

$$40 = Wn$$

$$\frac{60}{1.5} = \frac{\frac{2}{3} \cdot Wn \cdot \frac{3}{2}}{\frac{3}{2}}$$

$$40 = Wn$$

Assignment

Problem Set 77 #6, 8-11, 15-17, 19, 21-22