

LESSON
7-2**Solving Problems with Proportions****Reteach**

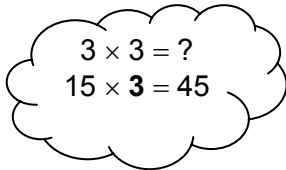
You can solve problems with proportions in two ways.

A. Use equivalent ratios.

Hanna can wrap 3 boxes in 15 minutes.
How many boxes can she wrap in 45 minutes?

$$\frac{3}{15} = \frac{\quad}{45}$$

$$\frac{3 \cdot 3}{15 \cdot 3} = \frac{9}{45}$$

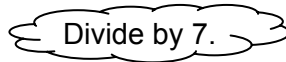


Hanna can wrap 9 boxes in 45 minutes.

B. Use unit rates.

Dan can cycle 7 miles in 28 minutes.
How long will it take him to cycle 9 miles?

$$\frac{28 \text{ min}}{7 \text{ mi}} = \frac{\quad}{1 \text{ mi}}$$



$$\frac{28}{7} = \frac{28 \div 7}{1} = \frac{4}{1}, \text{ or 4 minutes per mile}$$

To cycle 9 miles, it will take Dan 9×4 , or 36 minutes.

Solve each proportion. Use equivalent ratios or unit rates. Round to the nearest hundredth if needed.

1. Twelve eggs cost \$2.04. How much would 18 eggs cost?

2. Seven pounds of grapes cost \$10.43. How much would 3 pounds cost? _____

3. Roberto wants to reduce a drawing that is 12 inches long by 9 inches wide. If his new drawing is 8 inches long, how wide will it be?
