

Chapter 1 Ratios and Proportional Reasoning

Lesson 1-6 Solve Proportional Relationships

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 Solve the proportion.


$$\frac{1.5}{6} = \frac{10}{p}$$

$$1.5p = 10(6) \quad \text{Find the cross products.}$$

$$1.5p = 60 \quad \text{Multiply.}$$

$$\frac{1.5p}{1.5} = \frac{60}{1.5} \quad \text{Divide each side by 1.5.}$$

$$p = 40 \quad \text{Simplify.}$$

 Mrs. Baker paid \$2.50 for 5 pounds of bananas. Write an equation relating the cost c to the number of pounds p of bananas. How much would Mrs. Baker pay for 8 pounds of bananas?

$$\frac{\$2.50}{5 \text{ lbs}} = \frac{\$0.50}{1 \text{ lb}} \quad \text{The unit cost of the bananas is \$0.50 per pound.}$$

Write an equation to find the cost of any number of pounds of bananas.

$$c = 0.50p \quad \text{Let } c \text{ represent the cost. Let } p \text{ represent the pounds of bananas.}$$

$$c = 0.50(8) \quad \text{Replace } p \text{ with 8.}$$

$$c = \$4.00 \quad \text{Simplify.}$$

It would cost \$4 to purchase 8 pounds of bananas.