

Chapter 1 Ratios and Proportional Reasoning

Lesson 1-6 Solve Proportional Relationships

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1 Solve the proportion.

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

$$1.5p = 10(6)$$

$$1.5p = 60$$

$$\frac{1.5p}{1.5} = \frac{60}{1.5}$$

$$p = 40$$

Find the cross products.

Multiply.

Divide each side by 1.5.

Simplify.

7 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?

$$\frac{\$2.50}{5 \text{ lbs}} = \frac{\$0.50}{1 \text{ lb}}$$

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.

$$c = 0.50p$$

$$c = 0.50(8)$$

$$c = \$4.00$$

Let c represent the cost. Let p represent the pounds of bananas.

Replace p with 8.

Simplify.

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