

## 3

## CHAPTER REVIEW

## 3.7 Solve Percent Problems

pp. 176–181

## EXAMPLE

42 is 40% of what number?

$$a = p\% \cdot b \quad \text{Write percent equation.}$$

$$42 = 40\% \cdot b \quad \text{Substitute 42 for } a \text{ and 40 for } p.$$

$$42 = 0.4 \cdot b \quad \text{Write percent as decimal.}$$

$$105 = b \quad \text{Divide each side by 0.4.}$$

▶ 42 is 40% of 105.

## EXERCISES

Use the percent equation to answer the question.

53. What number is 30% of 55?

54. 117 is 78% of what number?

55. What percent of 56 is 21?

56. What percent of 60 is 18?

57. **CONCERTS** There were 7500 tickets sold for a concert, 20% of which were general admission tickets. How many general admission tickets were sold?

## EXAMPLES

2, 3, 4, and 5

on pp. 177–179  
for Exs. 53–57

## 3.8 Rewrite Equations and Formulas

pp. 184–189

## EXAMPLE

Write  $5x + 4y - 7 = 5$  so that  $y$  is a function of  $x$ .

$$5x + 4y - 7 = 5 \quad \text{Write original equation.}$$

$$5x + 4y = 12 \quad \text{Add 7 to each side.}$$

$$4y = 12 - 5x \quad \text{Subtract } 5x \text{ from each side.}$$

$$y = 3 - \frac{5}{4}x \quad \text{Divide each side by 4.}$$

## EXERCISES

Write the equation so that  $y$  is a function of  $x$ .

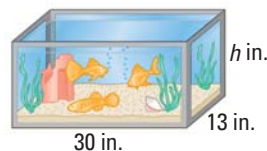
58.  $x + 7y = 0$

59.  $3x = 2y - 18$

60.  $4y - x = 20 - y$

61. **AQUARIUMS** A pet store sells aquariums that are rectangular prisms. The volume  $V$  of an aquarium is given by the formula  $V = lwh$  where  $l$  is the length,  $w$  is the width, and  $h$  is the height.a. Solve the formula for  $h$ .

b. Use the rewritten formula to find the height of the aquarium shown, which has a volume of 5850 cubic inches.



## EXAMPLES

2 and 3

on p. 185  
for Exs. 58–61