

*For more examples, go to* www.connected.mcgraw-hill.com*.*

**Course 3** • Equations and Inequalities

**27.** **GEOMETRY** Write an equation to represent the length of $\overline{PQ}$. Then find the value of *y*.

**26.** **GAMES** A card game has 50 cards. After dealing 7 cards to each player, Tupi has 15 cards left over. Solve the equation 50 – 7*p* = 15 to find the number of players.

**23.** $\frac{z + 5}{7}$ = –3

**24.** $\frac{9 + t}{12}$= –3

**22.** $\frac{k - 3}{4}$ = 10

**11.** – $\frac{1}{3}$ *y* – 6 = –11

**25.** **SHOPPING** Mrs. Williams shops at a store that has an annual membership fee of $30. Today she paid her annual membership and bought several fruit baskets costing $15 each as gifts for her coworkers. Her total was $105. Solve the equation 15*b* + 30 = 105 to find the number of fruit baskets Mrs. Williams purchased.

**Homework Practice**

***Solve Two-Step Equations***

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12 *y* 3*y*

*P Q*

**21.** –48 = 6(*v* + 2)

**20.** 7(*p* – 3) = 35

**19.** 3(*y* + 5) = 21

**18.** 6*a* + 7 – *a* = –18

**17.** 25 = *s* + 13 – 4*s*

**16.** –18 = 8*x* – 9 – 5*x*

**15.** 5 – 7*m* + 9*m* = 11

**14.** *w* + 3*w* = 20

**13.** 30 = 5*d* – 8*d*

**10.** 15 – 2*b* = –9

**12.** 16 – $\frac{r}{7}$= 21

**9.** 4 – 3*y* = 31

**8.** 6 + $\frac{n}{5}$= –4

**7.** 10 = $\frac{z}{2}$+ 7

**6.** 13 = 4*x* –11

**5.** 7*k* – 5 = –19

**4.** –15 = 2*t* – 11

**3.** 13 = 5*m* – 2

**2.** 9 = 4*a* + 13

**1.** 3*g* + 5 = 17

**Solve each equation. Check your solution.**

PERIOD

DATE

NAME \_\_\_\_\_\_