

**1-5 Skills Practice****Equations**

Find the solution of each equation if the replacement sets are  $A = \{4, 5, 6, 7, 8\}$  and  $B = \{9, 10, 11, 12, 13\}$ .

1.  $5a - 9 = 26$

2.  $4a - 8 = 16$

3.  $7a + 21 = 56$

4.  $3b + 15 = 48$

5.  $4b - 12 = 28$

6.  $\frac{36}{b} - 3 = 0$

Find the solution of each equation using the given replacement set.

7.  $\frac{1}{2} + x = \frac{5}{4}; \left\{ \frac{1}{2}, \frac{3}{4}, 1, \frac{5}{4} \right\}$

8.  $x + \frac{2}{3} = \frac{13}{9}; \left\{ \frac{5}{9}, \frac{2}{3}, \frac{7}{9} \right\}$

9.  $\frac{1}{4}(x + 2) = \frac{5}{6}; \left\{ \frac{2}{3}, \frac{3}{4}, \frac{5}{4}, \frac{4}{3} \right\}$

10.  $0.8(x + 5) = 5.2; \{1.2, 1.3, 1.4, 1.5\}$

Solve each equation.

11.  $10.4 - 6.8 = x$

12.  $y = 20.1 - 11.9$

13.  $\frac{46 - 15}{3 + 28} = a$

14.  $c = \frac{6 + 18}{31 - 25}$

15.  $\frac{2(4) + 4}{3(3 - 1)} = b$

16.  $\frac{6(7 - 2)}{3(8) + 6} = n$

**17. SHOPPING ONLINE** Jennifer is purchasing CDs and a new CD player from an online store. She pays \$10 for each CD, as well as \$50 for the CD player. Write and solve an equation to find the total amount Jennifer spent if she buys 4 CDs and a CD player from the store.

**18. TRAVEL** An airplane can travel at a speed of 550 miles per hour. Write and solve an equation to find the time it will take to fly from London to Montreal, a distance of approximately 3300 miles.

**1-5 Practice****Equations**

Find the solution of each equation if the replacement sets are  $a = \left\{0, \frac{1}{2}, 1, \frac{3}{2}, 2\right\}$  and  $b = \{3, 3.5, 4, 4.5, 5\}$ .

1.  $a + \frac{1}{2} = 1$

2.  $4b - 8 = 6$

3.  $6a + 18 = 27$

4.  $7b - 8 = 16.5$

5.  $120 - 28a = 78$

6.  $\frac{28}{b} + 9 = 16$

Solve each equation.

7.  $x = 18.3 - 4.8$

8.  $w = 20.2 - 8.95$

9.  $\frac{37 - 9}{18 - 11} = d$

10.  $\frac{97 - 25}{41 - 23} = k$

11.  $y = \frac{4(22 - 4)}{3(6) + 6}$

12.  $\frac{5(2^2) + 4(3)}{4(2^3 - 4)} = p$

**13. TEACHING** A teacher has 15 weeks in which to teach six chapters. Write and then solve an equation that represents the number of lessons the teacher must teach per week if there is an average of 8.5 lessons per chapter.

**14. CELL PHONES** Gabriel pays \$40 a month for basic cell phone service. In addition, Gabriel can send text messages for \$0.20 each. Write and solve an equation to find the total amount Gabriel spent this month if he sends 40 text messages.