

**3.1****Practice**

For use with pages 119-124

Tell whether the given value of the variable is a solution of the equation.

1.  $6x - 7 = 17; x = 4$

2.  $1 = 4x + 9; x = -2$

3.  $8 - 3x = 5; x = -1$

4.  $-15 = -3x + 15; x = 5$

5.  $\frac{x}{5} - 6 = -2; x = 20$

6.  $-6 = \frac{x}{2} - 7; x = -2$

Solve the equation. Check your solution.

7.  $7x + 12 = 26$

8.  $2x + 9 = -5$

9.  $-4 = 9x + 23$

10.  $-10 = 6x - 16$

11.  $25 - 3x = -8$

12.  $4x - 15 = 25$

13.  $70 = 19 - 3x$

14.  $-2x - 47 = -11$

15.  $-14 = -22 - \frac{x}{3}$

16.  $\frac{x}{12} + 13 = 18$

17.  $-10 = 8 - \frac{x}{7}$

18.  $3 = \frac{x}{25} + 6$

19.  $250 = 124 - 3x$

20.  $-\frac{x}{9} - 12 = -23$

21.  $56 - \frac{x}{15} = 47$

**3.1**

Continued

**Practice**

For use with pages 119–124

Write the verbal sentence as an equation. Then solve the equation.

22. Fourteen minus the product of 3 and a number is 26.
23. Negative seven minus the product of 5 and number is 28.
24. Eleven minus the quotient of a number and 8 is 15.
25. Negative sixteen plus the quotient of a number and 2 is 35.
26. Thirty-nine minus a number is  $-19$ .
27. Fifteen people volunteer for a park cleanup. The number of volunteers increases by 7 people each month for several months. After how many months will there be 50 volunteers?
28. You have a \$100 gift card to spend at a store. You buy a portable compact disc player for \$45. Compact discs are on sale for \$11 each. How many compact discs can you buy with the money remaining on the gift card?
29. A group of 4 friends are playing golf. The total cost of the round of golf is \$108. Each person in the group has the same coupon. The total cost of the round with the coupons is \$76. How much is the coupon worth?
30. A school makes \$715 from ticket sales for a school play. From the ticket sales, \$448 is from adult tickets. Student tickets are \$3 each. How many students attended the play?
31. You are rock climbing and descending a cliff at a rate of about 9 feet per minute. The cliff is about 360 feet high.
- a. How long until you are at a height of 234 feet?
- b. How long until you are halfway down the cliff?