Practice 2-2

Subtracting Rational Numbers

Simplify.

3.
$$-4 - 8$$

5.
$$18 - (-25)$$

6.
$$-32 - 17$$

9.
$$-8.2 - 0.8$$

13.
$$\frac{3}{4} - 1\frac{1}{4}$$

14.
$$-\frac{1}{3} - \frac{2}{3}$$

15.
$$-\frac{1}{4} - \left(-\frac{3}{4}\right)$$

19.
$$|-8 - (-32)|$$

Evaluate each expression for c = -3 and d = -6.

22.
$$c - d$$

23.
$$-c - d$$

24.
$$-c - (-d)$$

25.
$$|c + d|$$

26.
$$-c + d$$

27.
$$3c - 2d$$

Simplify.

32.
$$-5 + 7 - 9$$

33.
$$-2 - 2 - 4$$

Subtract.

34.
$$\begin{bmatrix} -3 & -1 \\ 2 & 4 \end{bmatrix} - \begin{bmatrix} 5 & -2 \\ -3 & 8 \end{bmatrix}$$

35.
$$\begin{bmatrix} 6.1 & -4 \\ -3.7 & -2.1 \end{bmatrix} - \begin{bmatrix} 7.0 & -2.3 \\ -1.6 & 4.2 \end{bmatrix}$$

- **36.** The temperature in the evening was 68°F. The following morning, the temperature was 39°F. What is the difference between the two temperatures?
- **37.** What is the difference in altitude between Mt. Everest, which is about 29,028 ft above sea level, and Death Valley, which is about 282 ft below sea level?
- **38.** Suppose the balance in your checking account was \$234.15 when you wrote a check for \$439.87. (This is known as overdrawing your account.) Describe the account's new balance.
- **39.** After three plays in which a football team lost 7 yd, gained 3 yd, and lost 1 yd, respectively, the ball was placed on the team's own 30-yd line. Where was the ball before the three plays?