## 2.3 EXERCISES

## SKILL PRACTICE

1. **VOCABULARY** Use the subtraction rule to rewrite the expression $-3 - 6$ as an addition expression.

2. **WRITING** Without actually subtracting, how can you tell whether a change in a quantity will be negative?

**EXAMPLE 1**
on p. 80
for Exs. 3–14

**FINDING DIFFERENCES** Find the difference.

3. $13 - (-5)$    4. $16 - 32$    5. $-11 - (-3)$    6. $-15 - 29$

7. $-35.9 - (-50)$    8. $14.7 - (-2.3)$    9. $-3.6 - 22.2$    10. $-18.2 - (-15.4)$

11. $\frac{1}{2} - \frac{5}{6}$    12. $-\frac{5}{3} - \frac{8}{3}$    13. $\frac{1}{2} - \left(-\frac{1}{4}\right)$    14. $-\frac{7}{10} - \left(-\frac{2}{5}\right)$

**EXAMPLE 2**
on p. 80
for Exs. 15–25

**ERROR ANALYSIS** *Describe* and correct the error in evaluating the expression when $x = 3$ and $y = -8$.

15.
$$x - y + 2 = 3 - 8 + 2$$
$$= 3 + (-8) + 2$$
$$= -5 + 2$$
$$= -3$$ ✗

16.
$$x - (-4 + y) = 3 - [-4 + (-8)]$$
$$= 3 - (-12)$$
$$= 3 - 12$$
$$= -9$$ ✗

**EVALUATING EXPRESSIONS** Evaluate the expression when $x = 7.1$ and $y = -2.5$.

17. $x - (-y)$    18. $y - x - 12$    19. $x - (-6) + y$

20. $x - (y - 13)$    21. $-y - (1.9 - x)$    22. $-y - x$

23. $x - y - 2$    24. $5.3 - (y - x)$    25. $x + y - 2.8$

**EXAMPLE 3**
on p. 81
for Exs. 26–31

**EVALUATING CHANGE** Find the change in temperature or elevation.

26. From $-5°C$ to $-13°C$    27. From $-45°F$ to $62°F$

28. From $-300$ feet to $-100$ feet    29. From $1200$ meters to $-80$ meters

30. From $4.8°F$ to $-12.6°F$    31. From $-90.7$ miles to $36.4$ miles

**EVALUATING EXPRESSIONS** Evaluate the expression when $x = 3.6$, $y = 6.6$, and $z = -11$.

32. $(x - y) - |z|$    33. $\left(x - |-y|\right) - z$    34. $x - |y - z|$

35. $(-x - y) - z - 5$    36. $x + y - z + 12.9$    37. $-z + y - x - (-2.4)$

38. 🔻 **TAKS REASONING** If the value of the expression $a - b$ is negative, which statement must be true?

Ⓐ $a > b$    Ⓑ $a = 0$    Ⓒ $a < b$    Ⓓ $b = 0$