Practice 1-4

Adding Real Numbers

Write the expression modeled by each number line. Then find the sum.

- - 2
- -2 2 6
- -2 0 2 -8 -6 -2 2

Simplify each expression.

5. 6 + (-4)

6. -2 + (-13)

7. -18 + 4

8. 15 + (-32)

9. -27 + (-14)

10. 8 + (-3)

11. -12.2 + 31.9

- **12.** -2.3 + (-13.9)
- **13.** 19.8 + (-27.4)

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

15. $\frac{2}{3} + \left(-\frac{1}{3}\right)$

16. $-\frac{7}{12} + \frac{1}{6}$

17. $2\frac{2}{3} + (-1)$

18. $-3\frac{3}{4} + 1\frac{1}{2}$

19. $2\frac{1}{3} + \left(-4\frac{2}{3}\right)$

20. -6.3 + 8.2

21. -3.82 + 2.83

- **22.** -7.8 + 9
- **23.** The temperature at 5:00 A.M. is -38°F. The temperature rises 20° by 11:00 A.M. Use addition to find the temperature at 11:00 A.M.
- **24.** A football team has possession of the ball on their own 15-yd line. The next two plays result in a loss of 7 yd and a gain of 3 yd, respectively. Use addition to find the position of the ball after the two
- **25.** Suppose your opening checking account balance is \$124.53. You write a check for \$57.49 and make a deposit of \$103.49. Use addition to find your new balance.
- **26.** During an emergency exercise, a submarine dives 37 ft, rises 16 ft, and then dives 18 ft. Use addition to find the net change in the submarine's position after the second dive.

Evaluate each expression for $m \neq 2.5$.

27. -m + 1.6

28. -3.2 + m

29. -2.5 + (-m)

30. -m + (-4.1)

31. 5.7 + m

32. m + (-1.9)

Simplify.

- **33.** -3 + (-6) + 14
- **34.** 4 + (-8) + (-14)
- **35.** 2.7 + (-3.2) + 1.5

- **36.** -2.5 + (-1.2) + (-2.3)
- **37.** $\frac{1}{2} + \left(-\frac{1}{3}\right) + \frac{1}{4}$
- **38.** $-\frac{2}{3} + \left(-\frac{1}{3}\right) + \left(-1\frac{1}{3}\right)$
- **39.** A hiker starts at an elevation of 542 feet. Define a variable and write an expression to find her elevation after it changes. Then evaluate your expression for each change.
 - **a.** an increase of 125 feet
- **b.** a decrease of 31 feet
- **c.** a decrease of 89 feet
- **d.** an increase of 62 feet