

Practice and Applications

Solve each equation. Check your solution.

11. $a + 3 = 10$

12. $y + 5 = 11$

13. $x + 8 = 5$

14. $y + 15 = 11$

15. $r + 6 = -3$

16. $k + 3 = -9$

17. $s - 8 = 9$

18. $w - 7 = 11$

19. $q - 8 = -1$

20. $p - 13 = -2$

21. $x - 5 = -9$

22. $w - 9 = -12$

23. $34 + r = 95$

24. $64 + y = 84$

25. $-23 = x - 18$

26. $-59 = m - 11$

27. $-18 + c = -30$

28. $-34 = t + 9$

29. The sum of a number and 3 is -2 . Find the number.

30. If you decrease a number by 4, the result is -5 . Find the number.

Solve each equation. Check your solution.

31. $a - 3.5 = 14.9$

32. $x - 2.8 = 9.5$

33. $r - 8.5 = -2.1$

34. $z - 9.4 = -3.6$

35. $n + 1.4 = 0.72$

36. $b + 2.25 = 1$

ROLLER COASTERS For Exercises 37 and 38, use the table.

37. *Superman The Escape* is 105 feet taller than *Millennium Force*. Write and solve an addition equation that you could use to find the height of *Millennium Force*.

38. The difference in the speeds of *Superman The Escape* and *Millennium Force* is 7 miles per hour. If *Superman The Escape* has the greater speed, write and solve a subtraction equation to find its speed.

39. **CRITICAL THINKING** Suppose $x + y = 10$ and the value of x increases by 3. What must happen to the value of y so that $x + y = 10$ is still a true sentence?

Tallest Steel Roller Coasters in North America	Height (feet)	Speed (mph)
Superman The Escape	415	?
Millennium Force	?	93
Titan	245	85
Goliath	235	85
Nitro	230	80

Source: www.rcdb.com

Spiral Review with Standardized Test Practice

40. **MULTIPLE CHOICE** The Sears Tower in Chicago is 1,454 feet tall. It is 204 feet taller than the Empire State Building in New York City. Use the equation $e + 204 = 1,454$ to find the height of the Empire State Building.

(A) 1,250 ft

(B) 1,350 ft

(C) 1,450 ft

(D) 1,650 ft

41. **GRID IN** If $x + 3 = 2$, what is the value of $2x + 5$?

42. **ALGEBRA** Write an expression for 6 inches less than w . (Lesson 4-1)

Divide. (Lesson 3-7)

43. $-15 \div 3$

44. $36 \div (-9)$

45. $-63 \div (-7)$

46. $-4 \div 9$

GETTING READY FOR THE NEXT LESSON

PREREQUISITE SKILL Divide. (Page 562)

47. $15.6 \div -3$

48. $8.84 \div 3.4$

49. $75.25 \div 0.25$

50. $0.76 \div 0.5$



msmath2.net/self_check_quiz