

Extra Practice ■ Chapter 1

LESSON 1-1

Evaluate each expression for the given value(s) of the variable(s).

- $3 + x$ for $x = 5$
- $6m - 2$ for $m = 3$
- $2(p + 3)$ for $p = 8$
- $4x + y$ for $x = 1, y = 3$
- $2y - x$ for $x = 3, y = 6$
- $5x + 1.5y$ for $x = 2, y = 4$

LESSON 1-2

Write an algebraic expression for each word phrase.

- seven less than a number b
- eight more than the product of 7 and a
- a quotient of 8 and a number m
- five times the sum of c and 18

Write a word phrase for each algebraic expression.

- $9 + \frac{x}{3}$
- $19x - 14$
- $\frac{1}{3}(x + 1)$
- $\frac{4}{x} - 100$
- Write a word problem that can be evaluated by the algebraic expression $x - 122$, and then evaluate the expression for $x = 225$.

LESSON 1-3

- In a miniature golf game the scores of four brothers relative to par are Jesse 3, Jack -2 , James -5 , and Jarod 1. Use $<$, $>$, or $=$ to compare Jack's and Jarod's scores. Then list the brothers in order from the lowest score to the highest.

Write the integers in order from least to greatest.

- $-4, 6, -2$
- $1, -16, 9$
- $-14, -2, -19$

Simplify each expression.

- $|9| + |-4|$
- $|-3| + |-19|$
- $|52 - 12|$
- $|5 + 7| - |8 - 6|$
- $|-4| - |1 + 3|$
- $|13 - 9| + |-15|$

LESSON 1-4

Add.

- $-4 + 6$
- $3 + (-8)$
- $-6 + (-2)$
- $7 + (-11)$

Evaluate each expression for the given value of the variable.

- $x + 9$ for $x = -8$
- $x + 3$ for $x = -3$
- $x + 5$ for $x = -7$

- The middle school registrar is checking her records. Use the information in the table to find the net change in the number of students for this school for the week.

Day	Students Registering	Students Withdrawing
Monday	4	2
Tuesday	6	7
Wednesday	5	5
Thursday	1	4
Friday	4	0

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LESSON 1-5

Subtract.

34. $-6 - 4$

35. $8 - (-3)$

36. $-6 - (-3)$

37. $-5 - 8$

Evaluate each expression for the given value of the variable.

38. $7 - x$ for $x = -4$

39. $-8 - s$ for $s = -6$

40. $-8 - b$ for $b = 12$

41. $|3 + x|$ for $x = -2$

42. $|-7 - b| - 4$ for $b = 10$

43. $|-5 - m| + |-6|$ for $m = 3$

44. An elevator rises 351 feet above ground level and then drops 415 feet to the basement. What is the position of the elevator relative to ground level?

LESSON 1-6

Multiply or divide.

45. $8(-6)$

46. $\frac{-63}{7}$

47. $-7(-3)$

48. $\frac{52}{-4}$

Simplify.

49. $8(4 - 5)$

50. $-5(9) - 11$

51. $-4(-16 + 4)$

52. $3 + 7(10 - 14)$

LESSON 1-7

Solve.

53. $4 + x = 13$

54. $t - 3 = 8$

55. $17 = m + 11$

56. $5 + a = 7$

57. $p - 5 = 23$

58. $31 + y = 50$

59. $18 + k = 34$

60. $g - 16 = 23$

61. Richard biked 39 miles on Saturday. This distance is 13 more miles than Trevor biked. How many miles did Trevor bike on Saturday?

LESSON 1-8

Solve and check.

62. $\frac{a}{-4} = -2$

63. $-49 = 7d$

64. $\frac{c}{-2} = -8$

65. $-57 = 3p$

66. $-8b = 64$

67. $144 = -9y$

68. $\frac{x}{2} = -78$

69. $19c = 152$

70. Jessica hiked a total of 36 miles on her vacation. This distance is 4 times as far as she typically hikes. How many miles does Jessica typically hike?

LESSON 1-9

Translate each sentence into an equation.

71. 8 less than the product of 5 and a number x is 53.

72. 7 more than the quotient of a number t and 6 is 9.

Solve.

73. $3m + 5 = 23$

74. $9 + \frac{x}{4} = 31$

75. $-1 = 6y + 11$

76. $-16 = -7 + \frac{m}{5}$