

Extra Practice ■ Chapter 11

LESSON 11-1

Solve.

1. $4c - 13 = 15$

2. $3h + 14 = 23$

3. $-5j - 13 = 22$

4. $\frac{e}{7} + 2 = 5$

5. $\frac{m}{6} - 3 = 1$

6. $\frac{x}{3} + 5 = -13$

LESSON 11-2

Simplify. Justify your steps using the Commutative, Associative, and Distributive Properties when necessary.

7. $5b + 3t + b$

8. $t + 3b + 3t + 3b + x$

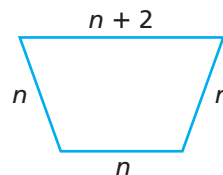
9. $8g + 3g + 12$

10. $3u + 6 + 5k + u$

11. $11 + 5t^2 + t + 6t$

12. $y^3 + 3y + 6y^3$

13. Write an expression for the perimeter of the given figure. Then simplify the expression.



LESSON 11-3

Solve.

14. $2w - 11 + 4w = 7$

15. $7v + 5 - v = 11$

16. $-7z + 4 - z = -12$

17. $3(5x - 7) = -36$

18. $2t - 7 - 5t = 11$

19. $6(t + 8) = 66$

20. $12a - 3 - 8a = -1$

21. $2(h - 1) + 3 = 12$

22. $\frac{1}{4}(3s - 14) = 4$

23. $4(t + 5) - 20 = 0$

LESSON 11-4

Group the terms with variables on one side of the equal sign, and simplify.

24. $6a = 4a - 8$

25. $3d - 5 = 7d - 9$

26. $-2j + 6 = j - 3$

27. $2 + 5m = 7 - m$

Solve.

28. $7y - 9 = -2y$

29. $2c - 13 = 5c + 11$

30. $4g + 90 = -60 - 6g$

31. $7d + 4 = 8 - d$

32. $-3p + 8 = -7p - 12$

33. $12k + 23 = -5k + 74$

34. Roberta and Stanley are collecting signatures for a petition. So far, Roberta has twice as many signatures as Stanley. If she collects 30 more signatures, she will have 4 times as many signatures as Stanley currently has. How many signatures has Stanley collected?

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LESSON 11-5

Write an inequality for each situation.

35. The cafeteria could hold no more than 50 people.

36. There were fewer than 20 boats in the marina.

Graph each inequality.

37. $y < -2$

38. $f \geq 3$

39. $n \leq -1.5$

40. $x > 4$

Graph each compound inequality.

41. $1 < s < 4$

42. $-1 \leq v < 2$

43. $w < 0$ or $w \geq 5$

44. $-3.5 \leq y < -2$

LESSON 11-6

Solve. Then graph each solution set on a number line.

45. $c - 6 > -5$

46. $v - 3 \geq 1$

47. $w - 6 \leq -7$

48. $a - 2 \leq 5$

Solve. Check each answer.

49. $q + 3 \leq 5$

50. $m + 1 > 0$

51. $p + 7 \leq 4$

52. $z + 2 \geq -3$

53. By Saturday night, 3 inches of rain had fallen in Happy Valley. The weekend forecast predicted at least 8 inches of rain. How much more rain must fall on Sunday for this forecast to be correct?

LESSON 11-7

Solve. Check each answer.

54. $\frac{a}{5} \leq 4.5$

55. $-\frac{v}{2} > 2$

56. $\frac{x}{3.9} \geq -2$

57. $-\frac{c}{4} < 2.3$

58. $13y < 39$

59. $2t \leq 5$

60. $-7r > 56$

61. $3s \geq -4.5$

62. The local candy store buys candy in bulk and then sells it by the pound. If the store owner spends \$135 on peppermints and then sells them for \$3.50 per pound, how many pounds must he sell to make a profit?

LESSON 11-8

Solve. Then graph each solution set on a number line.

63. $\frac{m}{3} - 1 \leq 2$

64. $7.2x - 4.8 > 24$

65. $-5.5h + 2 < 13$

66. $-1 - \frac{s}{3.5} \geq 1$

67. $-\frac{w}{1.5} - 8 \leq -10$

68. $4j - 6 > 16$

69. $5 - 2u < 15$

70. $\frac{r}{7} - 1 \geq 0$

71. $5 - \frac{m}{9} \leq 17$

72. Jill, Serena, and Erin are trying to earn enough money to rent a beach house for a week. They estimate that it will cost at least \$1,650. If Jill has already earned \$600, how much must each of the others earn?