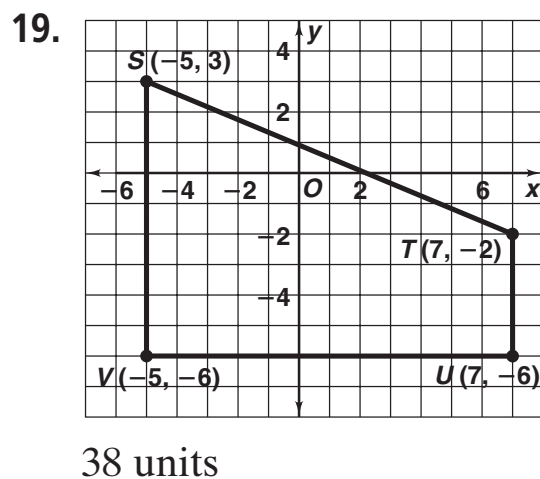
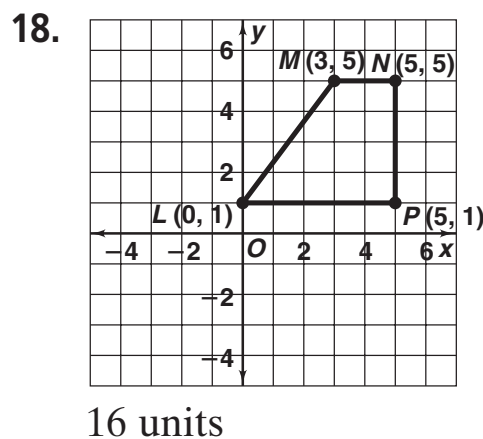
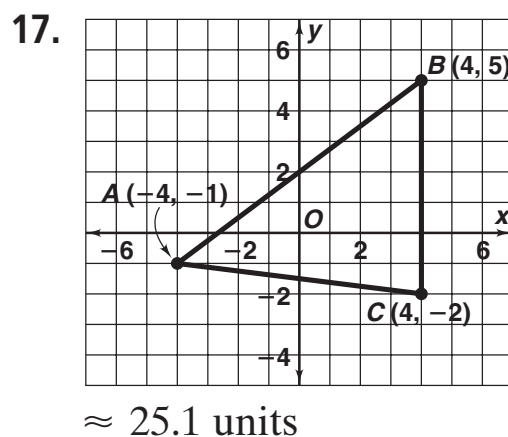
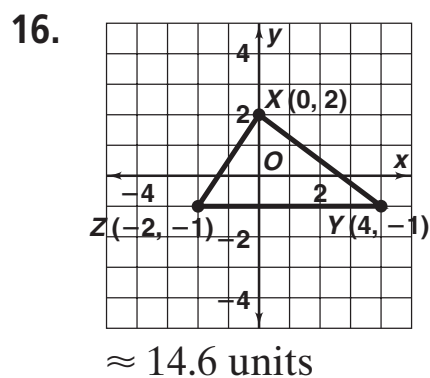


Answers for Lesson 1-9, pp. 65–68 Exercises

1. 22 in. 2. 36 cm 3. 56 in. 4. 78 cm
 5. 120 m 6. 48 in. 7. 38 ft 8. 15π cm
 9. 10π ft 10. 3.7π in. 11. $\frac{1}{2}\pi$ m 12. 56.5 in.
 13. 22.9 m 14. 1.6 yd 15. 351.9 cm



20. $1\frac{1}{3}$ ft² or 192 in.² 21. 4320 in.² or $3\frac{1}{3}$ yd²
 22. $1\frac{1}{8}$ ft² or 162 in.² 23. 8000 cm² or 0.8 m²
 24. 5.7 m² or 57,000 cm² 25. 120,000 cm² or 12 m²
 26. 6000 ft² or $666\frac{2}{3}$ yd² 27. 400π m²
 28. 64π ft² 29. $\frac{9}{64}\pi$ in.² 30. 0.25π m² 31. 9.9225π ft²

Answers for Lesson 1-9, pp. 65–68 Exercises (cont.)

32. $0.01\pi \text{ m}^2$ 33. 153.9 ft^2 34. 54.1 m^2 35. 452.4 cm^2

36. 452.4 in.^2 37. 310 m^2 38. 80 in.^2

39. a. 144 in.^2 b. 1 ft^2

c. 144; a square whose sides are 12 in. long and a square whose sides are 1 ft long are the same size.

40. a. 30 squares b. 16; 9; 4; 1

c. They are =. Post. 1-10

41. 3289 m^2

42–45. Answers may vary. Samples are given.

42. 38 in.; 90 in.^2 43. 39 in.; 93.5 in.^2

44. 12 ft; 8 ft^2 45. 8 ft; 3.75 ft^2

46. Answers may vary. Sample: For Exercise 44, you use feet because the bulletin board is too big for inches.

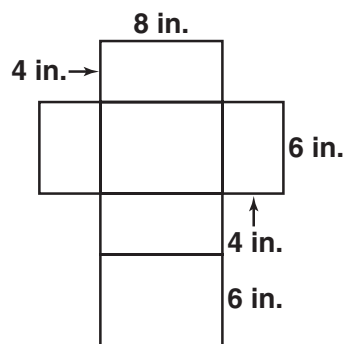
47. 16 cm 48. 96 cm^2 49. 288 cm

50. a. Yes; every square is a rectangle.

b. Answers may vary. Sample: No, not all rectangles are squares.

c. $A = \left(\frac{P}{4}\right)^2$ or $A = \frac{P^2}{16}$

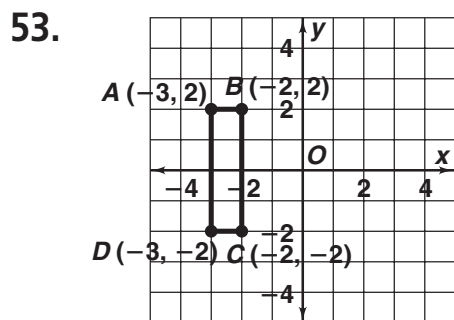
51. a.



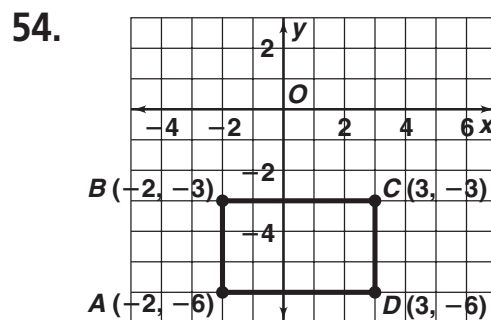
b. 208 in.^2 , 208 in.^2

Answers for Lesson 1-9, pp. 65–68 Exercises (cont.)

52. 512 tiles



perimeter = 10 units
area = 4 units²



perimeter = 16 units
area = 15 units²

55. 38 units

56. 54 units²

57. 1,620,000 m²

58. D

59. Area; the wall is a surface.

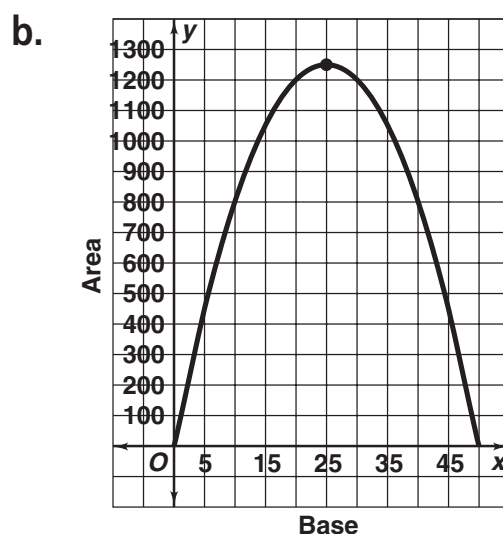
60. Perimeter; weatherstripping must fit the edges of the door.

61. Perimeter; the fence must fit the perimeter of the garden.

62. Area; the floor is a surface. 63. 6.25π units²

64. a.

base	height	area
1	98	98
2	96	192
3	94	282
	⋮	
24	52	1248
25	50	1250
26	48	1248
	⋮	
47	6	282
48	4	192
49	2	98



c. 25 ft by 50 ft

Answers for Lesson 1-9, pp. 65–68 Exercises (cont.)

65. a. 9 b. 9 c. 9 d. 9

66. $\frac{3a}{20}$ units² 67. $\frac{25n^2}{4}$ units²

68. $(9m^2 - 24mn + 16n^2)$ units²

69. Answers may vary. Sample: one 8 in.-by-8 in. square +
one 5 in.-by-5 in. square + two 4 in.-by-4 in. squares

70. 388.5 yd