Answers for Lesson 1-8, pp. 56–58 Exercises

1. 6

2. 18

3. 8

4. 9

5. 23.3

6. 10

7. 25

8. 12.2

9. 12.0

10. 9 mi

11. about 4.5 mi

12. about 3.2 mi

13. 6.4

14. 15.8

15. 15.8

16. 5.0

17. B, C, D, E, F

18. $(4, 2)$

19. $(3, 1)$

20. $(3.5, 1)$

21. $(6, 1)$

22. $(-2.25, 2.1)$

23. $(3\frac{7}{8}, -3)$

24. $(10, -20)$

25. $(5, -1)$

26. $(0, -34)$

27. $(12, -24)$

28. $(9, -28)$

29. $(5.5, -13.5)$

30. $(8, 18)$

31. $(4, -11)$

32. 5.0; $(4.5, 4)$

33. 5.8; $(1.5, 0.5)$

34. 7.1; $(-1.5, 0.5)$

35. 5.4; $(-2.5, 3)$

36. 10; $(1, -4)$

37. 2.8; $(-4, -4)$

38. 6.7; $(-2.5, -2)$

39. 5.4; $(3, 0.5)$

40. 2.2; $(3.5, 1)$

41. IV

42.
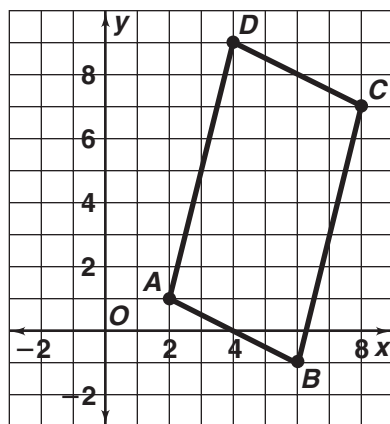
The midpts. are the same, $(5, 4)$.
The diagonals bisect each other.

Answers for Lesson 1-8, pp. 56–58 Exercises (cont.)

43. B

44. 19.2 units; $(-1.5, 0)$ **45.** 10.8 units; $(3, -4)$

46. 5.4 units; $(-1, 0.5)$

47. 165 units; The dist. TV is less than the dist. TU, so the airplane should fly from T to V to U for the shortest route.

48. Z; about 12 units

49. 934 mi   **50.** 1073 mi

51. 2693 mi   **52.** 328 mi

53–56. Answers may vary. Samples are given.

53. $(3, 6), (0, 4.5)$ **54.** $E (0, 0), (8, 4)$

55. $(1, 0), (-1, 4)$ **56.** $(0, 10), (5, 0)$

57. exactly one pt., $H (-5, 2)$ **58.** exactly one pt., $J (2, -2)$

59. a–f. Answers may vary. Samples are given.

a. $BC = AD$

b. If two opp. sides of a quad. are both $\parallel$ and $\cong$, then the other two opp. sides are $\cong$.

c. The midpts. are the same.

d. If one pair of opp. sides of a quad. are both $\parallel$ and $\cong$, then its diagonals bisect each other.
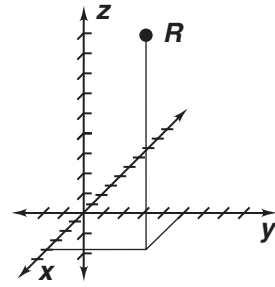
e. $EF = AB$

f. If a pair of opp. sides of a quad. are both $\parallel$ and $\cong$, then the segment joining the midpts. of the other two sides has the same length as each of the first pair of sides.

60. $A\ (0, 0, 0)$
$B\ (6, 0, 0)$
$C\ (6, -3.5, 0)$
$D\ (0, -3.5, 0)$
$E\ (0, 0, 9)$
$F\ (6, 0, 9)$
$G\ (0, -3.5, 9)$

61.

62. 6.5 units

63. 11.7 units