

ANSWERS FOR 1.3

For use with pages 22-24

1.3 Guided Practice

2. The equations have the same solution. *Sample answers:*

$$3x = 9, 3x - 1 = 8$$

4. $30\left(\frac{1}{5}x + \frac{1}{6}\right) = -2 \cdot 30$

$$6x + 5 = -60$$

$$6x = -65$$

$$x = -\frac{65}{6}$$

6. Add 8 to each side; then divide each side by 2.

8. 6

10. 43

12. 2

14. $\frac{7}{2}$

16. \$980,000

1.3 Practice and Applications

18. Multiply both sides by 6.

20. Add 9 to both sides; then divide both sides by 2.

22. Add 5 to both sides; then divide both sides by -1 .

24. 2

26. 12

28. $\frac{1}{2}$

30. 3

32. $-\frac{19}{8}$

34. $\frac{77}{12}$

36. $-\frac{23}{48}$

38. 1.8

40. -3.59

42. side lengths: 7, 10, 6

44. No, your dog's temperature is approximately 38.4°C and normal is 38.6°C .

46. 8 h

48. 40 points

50. a. ≈ 27.9 m

b. 500 m

- c. Yes; with 500 m of fencing a fence can be built with a 7.25 m gap between the track and the fence.

52. all real numbers

54. no solution

56. all real numbers

1.3 Mixed Review

58. 16 in.^2

60. 81 in.^2

62. -4

64. -4

66. 50

68. -12

70. $16 + 3x$

72. $-10x - 21$

74. $-6x - 2$

76. $-x^2 - 162$

78. $2x^2 + 12x + 8$