Answers for Lesson 6-1, pp. 262–264 Exercises

1. $3x - 2 = 7$

2. $-2x + 1 = -5$

3. Answers may vary. Sample: Add 8 to each side.

4. Answers may vary. Sample: Add 5 to each side.

5. Answers may vary. Sample: Add 12 to each side.

6. Answers may vary. Sample: Subtract 9 from each side.

7. about 56

8. -1

9. -4

10. 3

11. 4

12. -3.4

13. 5

14. -16

15. 338

16. 27

17. $4x + 5 = 68.96$; $15.99

18. $0.39p + 1.19 = 3.92$; 7 pencils

19. Yes; one can of beans costs $.89, so it will cost a total of $8.22 to buy another can.

20. Wendy's; Ben did not use the Dist. Prop.

21. 11 mg

22. Round 39.95 to 40 and 105.65 to 100. Solve $6p + 40 = 100$. The solution is $p = 10$. 24.27 is not reasonable.

23. Check students' work.
$$7b + 3 = 24$$
$$7b + 3 - 3 = 24 - 3 \text{ Subtr. Prop. of Eq.}$$
$$\frac{7b}{7} = \frac{21}{7} \text{ Div. Prop. of Eq.}$$
$$b = 3$$

24. 117

25. 12.6

26. -19.8

27. -6

28. 1

29. 4.2

30. a. $60 + 6x = 200$, $23\frac{1}{3}$ h;

   $9x = 200$, $22\frac{2}{9}$ h

   b. In the first equation, you need to subtract 60 and then divide by 6. In the second equation, you need only to divide each side by 9.

31. $x = 7$; It is the same. You could avoid working with decimals.

32. A   **33.** H   **34.** B   **35.** 22.8 m