LESSON 1-7	**Practice**

Solving Absolute-Value Equations

Solve each equation.

1. $|x| = 12$

2. $|x| = \dfrac{1}{2}$

3. $|x| - 6 = 4$

_____ _____ _____

4. $5 + |x| = 14$

5. $3|x| = 24$

6. $|x + 3| = 10$

_____ _____ _____

7. $|x - 1| = 2$

8. $4|x - 5| = 12$

9. $|x + 2| - 3 = 9$

_____ _____ _____

10. $|6x| = 18$

11. $|x - 1| = 0$

12. $|x - 3| + 2 = 2$

_____ _____ _____

13. How many solutions does the equation $|x + 7| = 1$ have?   _____

14. How many solutions does the equation $|x + 7| = 0$ have?   _____

15. How many solutions does the equation $|x + 7| = -1$ have?   _____

Leticia sets the thermostat in her apartment to 68 degrees. The actual temperature in her apartment can vary from this by as much as 3.5 degrees.

16. Write an absolute-value equation that you can
use to find the minimum and maximum temperature.   _____

17. Solve the equation to find the minimum and
maximum temperature.   _____

Holt McDougal Algebra 1

Name_____

Multi-Step Equations

Date_____ Period____

Solve each equation.

1) $-20 = -4x - 6x$

2) $6 = 1 - 2n + 5$

3) $8x - 2 = -9 + 7x$

4) $a + 5 = -5a + 5$

5) $4m - 4 = 4m$

6) $p - 1 = 5p + 3p - 8$

7) $5p - 14 = 8p + 4$

8) $p - 4 = -9 + p$

9) $-8 = -(x + 4)$

10) $12 = -4(-6x - 3)$

11) $14 = -(p - 8)$

12) $-(7 - 4x) = 9$

13) $-18 - 6k = 6(1 + 3k)$

14) $5n + 34 = -2(1 - 7n)$

15) $2(4x - 3) - 8 = 4 + 2x$

16) $3n - 5 = -8(6 + 5n)$

17) $-(1 + 7x) - 6(-7 - x) = 36$

18) $-3(4x + 3) + 4(6x + 1) = 43$

19) $24a - 22 = -4(1 - 6a)$

20) $-5(1 - 5x) + 5(-8x - 2) = -4x - 8x$