Name _____ Date _____

LESSON 6.5

Practice B

For use with pages 390–395

Solve the equation.

1. $|x| = 9$

2. $|x| = 2.25$

3. $|x| = \frac{3}{2}$

4. $|x - 6| = 14$

5. $|x + 1| = 8$

6. $|2x - 3| = 15$

7. $|4x + 1| = 15$

8. $|7x + 2| = 23$

9. $|5 - 2x| = 9$

10. $3|2x - 2| = 18$

11. $4|5x - 1| = 36$

12. $2|6x + 5| - 1 = 25$

Solve the equation, if possible.

13. $|x + 3| - 4 = -1$

14. $|x - 8| - 9 = -5$

15. $|x + 3| + 2.5 = 3$

16. $-6|10 - 2x| = 24$

17. $-3|4x + 3| = -9$

18. $-4|5 + 2x| = -16$

19. $-\frac{1}{3}|1 - 8x| = 2$

20. $|3x - 8| + 0.25 = 0.75$

21. $|6x + 5| - 1.3 = -1.9$

Name _____ Date _____

LESSON 6.5

Practice B *continued*

For use with pages 390–395

Find the values of x that satisfy the definition of absolute value for the given value and the given absolute deviation.

22. Given value: 3; absolute deviation: 5

23. Given value: 1; absolute deviation: 7

24. Given value: −4; absolute deviation: 2

25. Given value: −2.5; absolute deviation: 8

26. **Food Scale** Bakers will typically weigh out flour for recipes rather than use a measuring cup because weighing is a more accurate measure. A baker is using a scale that has an absolute error of 0.05 gram.

a. Find the minimum and maximum possible weights if the scale is used to measure out 225 grams of flour.

b. Find the minimum and maximum possible weights if the scale is used to measure out 300 grams of flour.

c. Find the minimum and maximum possible weights if the scale is used to measure out 420 grams of flour.

27. **Toothpaste Prices** The average price of the brand of toothpaste that you buy is $2.49 for an 8.2-ounce tube. Depending on where you shop, the prices vary by as much as $.15.

a. Write an absolute value equation that represents the minimum and maximum prices of the toothpaste.

b. Find the minimum and maximum prices of the toothpaste.

c. You have a coupon for $.50 off two tubes of toothpaste. If you go to the store that has the minimum price for the toothpaste, how much will you pay for two tubes?