LESSON 5.7

NAME _____ DATE _____

Practice B

Solve the inequality.

1. $|x + 2| < 5$

2. $|x + 4| > 9$

3. $|x - 3| \leq 1$

6. $|3x - 6| < 3$

5. $|2x + 1| > 5$

6. $|2x - 3| \leq 7$

7. $|x - 3.2| \leq 8$

8. $|3x + 2| - 1 > 9$

9. $|x - 4| + 5 \leq 7$

10. $|2x - 3| > 9$

11. $|4x - 12| + 2 \geq 13$

12. $|x + 3| + 1 > 10$

Solve the inequality. Then graph the solution.

13. $|x + 1| \leq 27$

14. $|x - 8| > 14$

15. $|6 - 5x| < 9$

16. $|x - 3| \leq 6$

17. $|11 - x| < 20$

18. $|7x + 3| < 11$

19. $\left|\frac{1}{4}x - \frac{1}{3}\right| \leq \frac{1}{3}$

20. $|7 + 8x| > 5$

21. $\left|18 + \frac{1}{2}x\right| \geq 10$

Solve the inequality. Then graph the solution.

22. $|x + 7| \geq 1$

23. $|x - 4| < 6$

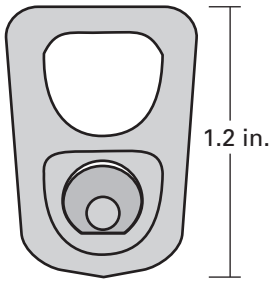
24. $|x - 6| \geq 2$

25. $|4x - 5| < 11$

26. $|3x + 2| \leq 8$

27. $|5x + 4| > 0$

28. ***Tool and Die*** A tool and die shop makes a metal pull tab for a pop can. The absolute value inequality $|\ell - 1.2| \leq 0.002$ represents the possible lengths of the tab (in inches) which are considered acceptable.



a. Is a tab that is 1.197 inches long acceptable? a tab that is 1.201 inches long?

b. Solve the absolute value inequality to find the possible tab lengths which are considered acceptable.