

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

### Absolute Value Inequalities

Solve the following. Write the solution in interval notation.

1.  $|x| < 6$

2.  $|x| \geq 9$

3.  $|x+5| < 11$

4.  $|x-1| \geq 9$

5.  $|x+8| \leq 18$

6.  $|x+24| > 3$

7.  $|2x-7| < 13$

8.  $|5x-1| > 16$

9.  $|11-2x| \geq 6$

10.  $|2-3x| \geq 10$

11.  $|16x-3| \leq 5$

12.  $|8x+1| < 3$

13.  $|9x-13| > 5$

14.  $|4x+3| \leq 5$

15.  $|7x+11| \geq 4$

16.  $|2-6x| < 10$

17.  $|1-12x| > 11$

18.  $|15x-2| \geq 8$

19.  $|x+2|+7 \geq 13$

20.  $|2x+9|-5 < 12$

21.  $|3x+15|-3 \leq 6$

22.  $|6x-1|+13 > 20$

23.  $|14x-3|+6 \geq 11$

24.  $|2x+9|-5 < 12$

25.  $2|4x+3|-7 \leq 3$

26.  $3|2x-13|-15 \leq 6$

27.  $|6x-1|+13 > 20$

28.  $|x+2| < -11$

29.  $|x+9| \leq -5$

30.  $|4x-3| \leq -2$

31.  $|12x+1| < -13$

32.  $|5-3x| \leq -1$

33.  $|5x-6| < -7$

34.  $|2x-6| > -4$

35.  $|6x-11| \geq -22$

36.  $|5x+22| > -43$

37.  $|x+5| \leq 0$

38.  $|8x-3| \leq 0$

39.  $|9x-2| < 0$

40.  $|x+9| \geq 0$

41.  $|5x-7| \geq 0$

42.  $|4x-3| \geq 0$

43.  $|x-3| > 0$

44.  $|x+1| > 0$

45.  $|4x+1| > 0$

46.  $\left| \frac{2x-3}{5} \right| < 7$

47.  $\left| \frac{5x-2}{4} \right| > 7$

48.  $\left| \frac{2-3x}{5} \right| \geq 5$