

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Basic Skills**  
**Solving Compound Inequalities**

Solve the inequality and graph the solution.

1.  $0 \leq x + 9 < 17$

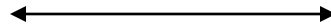
2.  $-14 < 7x < 21$

3.  $x - 4 < -12$  or  $2x \geq 12$



4.  $-13 \leq 5 - 2x < 9$

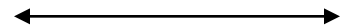
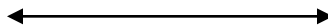
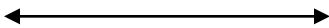
5.  $-22 > 11x$  or  $4 + x > 4$



6.  $2x + 1 > 13$  or  $-18 > 7x + 3$

7.  $-3 \leq 2x + 1 < 9$

8.  $1 \leq 3x \leq 6$



10.  $3x - 6 \leq 0$  or  $4x + 5 \geq -3$

11.  $7 < 1 - x < 13$



12. On Pennsylvania's interstate highway the speed limit is 65 mph. The minimum speed limit is 45 mph. Write a compound inequality that represents the speeds at which you may legally drive.