

# Practice 7-6

## Solving Two-Step Inequalities

Solve each inequality. Graph the solutions on a number line.

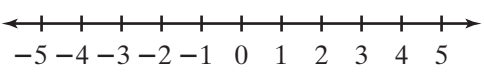
1.  $5x + 2 \leq 17$  \_\_\_\_\_ 

2.  $7x + 2x \geq 21 - 3$  \_\_\_\_\_ 

3.  $9 - x > 10$  \_\_\_\_\_ 

4.  $19 + 8 \leq 6 + 7x$  \_\_\_\_\_ 

5.  $-6x < 12$  \_\_\_\_\_ 

6.  $\frac{x}{4} > 0$  \_\_\_\_\_ 

Solve each inequality.

7.  $2x - 5 > 1$  \_\_\_\_\_

8.  $9x - 7 \leq 38$  \_\_\_\_\_

9.  $3 < \frac{1}{2}x + 1$  \_\_\_\_\_

10.  $-12 < -12x$  \_\_\_\_\_

11.  $-8x + 18 > -22$  \_\_\_\_\_

12.  $50 < 8 - 6x$  \_\_\_\_\_

13.  $\frac{1}{5}x + 6 > -3$  \_\_\_\_\_

14.  $30 \geq -6(5 - x)$  \_\_\_\_\_

Write an inequality for each situation. Then solve the inequality.

15. Nine more than half the number  $n$  is no more than  $-8$ . Find  $n$ .  
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16. Judith drove  $h$  hours at a rate of 55 mi/h. She did not reach her goal of driving 385 miles for the day. How long did she drive?  
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