Chapter 6, Practice Quiz 1
Lessons 6.1, 6.2, and 6.3

Name: _____

Date: _____ Hour: _____

<u>Skills Assessed:</u>

I can graph linear inequalities in one variable and solve one-step linear inequalities.
I can write, solve and graph compound inequalities.
I can solve multi-step linear inequalities and use them to model / solve real-life problems.

1) Sketch a graph of the inequality: $x \leq 8$ 1) _____

2) Solve the inequality and graph the solution.

     $5x < -25$ 2) _____

                                  Graph: _____

3) Solve the following inequality:

     $10x - 12 \geq 3x + 16$ 3) _____

4) Erica has scored 85 goals in her high school soccer career. She needs to score 97 to tie the school record for most goals scored. Let x represent the number of goals Erica needs to score to tie or beat the school record.

     a) Write an inequality to find x: a) _____

     b) What is the least number of goals Erica needs to score?   b) _____

     c) Graph the solution.   c) _____

5) Write an inequality that describes the   5) _____
   graph shown below.

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   ◄─┼──┼──●──┼──●──┼──┼──►
    −12 −10 −8  −6  −4  −2   0
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6) Sketch a graph of the inequality below.   6) _____

   $x > 12$ or $x \leq 7$
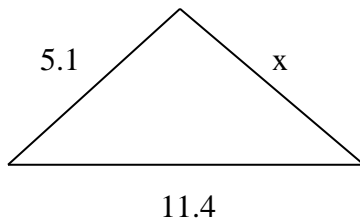
7) Solve the following inequality and graph the solution.   7) _____
   Show your work.

   $- 2 < -2x + 1 \leq 7$ Graph: _____

8) Consider the triangle below. Write a compound   8) _____
   inequality that describes the possible lengths of
   the side of the triangle labeled x. Use the fact
   that the sum of any two sides of a triangle is
   greater than the length of the third side.

   5.1 ╱‾‾‾╲ x
      ╱   ╲
     ╱   ╲
    ╱_____╲
       11.4