Name: _____ Date: _____

BLM 9–8

Section 9.2 Extra Practice

1. List three values that would make each inequality or combination of inequalities true.

a) $x \leq -4$ **b)** $x > -3$

c) $x \geq -2$ and $x \leq 5$

2. Solve each inequality.

a) $x + 5 \leq 12$ **b)** $2 > x - 9$

c) $7.4 + x \geq 6.2$ **d)** $x - 4.2 < 3.5$

e) $4x \leq -16$ **f)** $-1.3x > 16.9$

g) $\frac{x}{5} \leq -4$ **h)** $-\frac{1}{4}x \geq 3$

3. Verify if the specified solution is correct for each inequality.

a) $2x < -10$; $x > -5$ **b)** $-3x \leq -24$; $x \leq 8$

c) $-9 \geq -\frac{1}{3}x$; $3 \geq x$ **d)** $x + 8 < -12$; $x < 20$

e) $2x \geq -16$; $x \geq -8$ **f)** $-7 + x > -2$; $x > -9$

4. A balloon company guarantees that at least 18 of the balloons in each package are red. Fifteen percent of the balloons are red. What is the number of balloons in a package?

a) Write an inequality to model the situation.

b) Solve and verify the inequality.

c) Represent your answer verbally and graphically.

5. a) Write and solve an equation to determine the values of x that give the rectangle shown an area of no more than 25 square units.

b) Are there values of x that would not be possible for the length of the rectangle? Explain.