## **Section 9.2 Extra Practice**

- **1.** List three values that would make each inequality or combination of inequalities true.
  - **a)**  $x \le -4$  **b)** x > -3
  - **c)**  $x \ge -2$  and  $x \le 5$
- 2. Solve each inequality.

<b>a)</b> <i>x</i> + 5 ≤ 12	<b>b)</b> 2 > x - 9
<b>c)</b> 7.4 + <i>x</i> ≥ 6.2	<b>d)</b> <i>x</i> - 4.2 < 3.5
<b>e)</b> 4 <i>x</i> ≤ −16	<b>f)</b> -1.3 <i>x</i> > 16.9
<b>g)</b> $\frac{x}{5} \le -4$	<b>h)</b> $-\frac{1}{4}x \ge 3$

- **3.** Verify if the specified solution is correct for each inequality.
  - a) 2x < -10; x > -5b)  $-3x \le -24$ ;  $x \le 8$ c)  $-9 \ge -\frac{1}{3}x$ ;  $3 \ge x$ d) x + 8 < -12; x < 20e)  $2x \ge -16$ ;  $x \ge -8$ 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.

