Name: _____   Date: _____

Math 1050 PRACTICE Quiz (4.3-5.4)

1. Solve the following inequality and state the solution in interval notation.
$$3x^2 - x < 14$$

2. Solve the following inequality and state the solution in interval notation.
$$\frac{2}{x+3} \geq \frac{1}{x-5}$$

3. An appliance wholesaler finds the number x appliances she can sell each week is related to the price p by the equation $x = 2150 - p$, $\quad 0 \leq p \leq 2150$. What is the maximum revenue R? ($R = xp$) **Justify your answer.**

4. $h(t) = -t^2 + 4t + 7$ represents the height of a ball, in meters, thrown vertically t seconds after it was thrown.

a) What will be the height of the ball at 3 sec?

b) After how many seconds does the ball reach its maximum height?

c) What is the height of the ball when it is at maximum height?