$\qquad$

## Math 1050 PRACTICE Quiz\#2 (4.3-5.4)

1. Solve the following inequality and state the solution in interval notation.

$$
2 x^{2}+x \geq 3
$$

2. Solve the following inequality and state the solution in interval notation.

$$
\frac{3}{x+1}<\frac{4}{x-2}
$$

3. An appliance wholesaler finds the number $x$ appliances she can sell each week is related to the price $p$ by the equation $x=1500-p, \quad 0 \leq p \leq 1500$. What is the maximum revenue $R$ ? $(R=x p)$ Justify your answer.
4. $h(t)=-t^{2}+3 t+3$ represents the height of an object, in meters, thrown vertically $t$ seconds after it was thrown.
a) What will be the height of the object at 2 sec?
b) After how many seconds does the object reach its maximum height?
c) What is the height of the object when it is at maximum height?
