

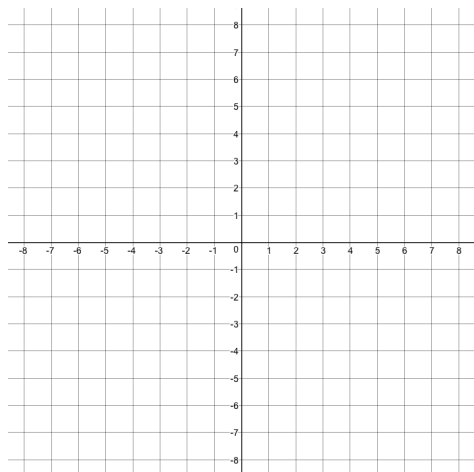
# Pre-Calculus 11 Section 4.4/4.5 – Quadratic Inequalities

**Homework:** Section 4.4 on Pg. 138 ; #2-3all

Section 4.5 on Pg. 142; #2-4, 7-15

**Ex 1** Find all values of  $x$  so that:  $x^2 - x > 6$

a) using a graph



b) using algebra

**Ex 2** Find all values of  $x$  so that:  $-2x^2 \geq 12 - 5x$

**Ex 3** The height of a ball above the ground ( $H$ , in metres) thrown from a building after  $t$  seconds is given by:  
 $H(t) = -4.9t^2 + 15.8t + 22.8$ . When is the ball less than 30m above the ground?

**Ex 4** Mr. G is buying green and blue highlighters for marking. The green highlighters cost \$2.50 and the blue highlighters cost \$2.25. He wants to buy at least 15 highlighters but needs at least 8 green highlighters. He can't spend more than \$50. Write a system of inequalities to describe the situation.