Perform the indicated operation

$$\frac{2 + 5i}{7 - 2i}$$

Solve

$4x^2 - 6x + 5 = x + 1$

Solving Inequalities Algebraically and Graphically

- Solving Absolute Value Inequalities
- Solving Quadratic Inequalities

~These techniques are involved in using a graphing utility to solve inequalities in this textbook

Sections P7:

HW: Math XL P7...due Wednesday at midnight

Solving an Absolute Value Equation

Solve

$$|2x - 1| = 11$$

Solving an Absolute Value Inequality

Solve

$$|2x + 3| < 7$$

Solving an Absolute Value Inequality

Solve

$$|x - 4| < 8$$

Solving an Absolute Value Inequality

Solve

$$|3x - 2| \geq 5$$

Solving a Quadratic Inequality

Solve

$$x^2 - x - 12 > 0$$

Solving a Quadratic Inequality

Solve

$$2x^2 + 3x \leq 20$$

Solving a Quadratic Inequality Graphically

Solve

$$x^2 - 4x \geq -1$$

Projectile Motion

Suppose an object is launched vertically from a point s_0 feet above the ground with an initial velocity of v_0 feet per second. The vertical position s (in feet) of the object t seconds after it is launched is

$$s = -16t^2 + v_0t + s_0.$$

Finding the Height of a Projectile

A projectile is launched straight up from ground level with an initial velocity of 288 ft/sec.

When will the projectile's height reach 1152 ft above the ground?

When will the projectile's height be at least 1152 ft above the ground?