2. You do not have to test all possible zeros. The RZT takes the place of the calculator, finding one rational root, then use depressed polynomials to continue.  
Example: Find all the zeros of 

***SAT WARM-UP*:** How many negative real zeros does  have?

**Vocabulary**

Rational Zero/Root Theorem

1. Rational Zero Theorem: if P(x) is a polynomial, then every rational zero of it is of the form p/q, where p is a factor of the constant term, and q is a factor of the leading coefficient.

You use this so you have a better idea of possible zeros, instead of just guess & check.

example: List all the possible rational zeros of each function:

a. 

b. 

3. Be “Smart” with your real world examples (pos/neg etc)  
example: The volume of a rectangular prism is 1056 cubic centimeters. The length is 1 cm more than the width, and the height is 3 cm less than the width. Find the dimensions of the prism.

This new function is called (f+g)(x)

6. Honors Group Work:

Find all zeros of the function: 

4: Try Another –Find all the zeros of 

5. Practice in Class #1-9

Practice at Home: 5.8 # 11,15,18,19,23,27,29,33,35,40