Outline of Spring Test 3 Topics

Algebra 2 Honors

March 23, 2011

The following are the major topics we have covered that may be on the third test. The test will cover up to problem 65:3. Calculators will not be allowed.

1. Complex numbers, polynomials, and symmmetry. Be able to solve all of the problems on the handout of the same name. Especially concentrate on understanding rectangular and polar forms of complex numbers, operations (addition, multiplication, division, and exponentiation) on complex numbers, Euler's formula, the geometry of complex numbers, how to calculate and plot roots of unity (and nth roots of arbitrary numbers), and finding complex roots of polynomials.

2. Sequences. Know the definition and properties of arithmetic and geometric sequences. Be able to determine a sequence from given information and give the closed and recursive forms. Understand applications to fractals and other recursively-defined structures. (57:4, 58:5, 58:11, 60:11, 63:3, 63:9-10, 65:2-3)

3. Not on this test but very likely on the next test: Graphs of logarithms and relation to graphs of exponential functions. Probability. Markov chains. Half-life.