Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**AP CALCULUS BC**

**Worksheet 1.5**

**Polynomials**

***Factor:***

1.  2.  3. 

4.  5.  6. 

***Use the Rational Roots Theorem, synthetic division, and any other algebraic techniques you know to factor the polynomial (no graphing). Name the zeros of the polynomial.***

7.  8. 

Zeros: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Zeros: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. 

Zeros: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Use your calculator to graph the polynomial and find the real zeros (to the nearest thousandth.)***

10.  11. 

12.  13. 