**5.2 Finding Zeros of Polynomials**

**IF.5 I can find the ‘zeros’ of polynomial functions**

**What is a polynomial function?**

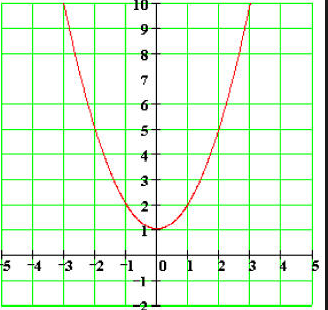
**Standard Form**

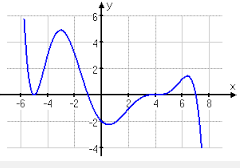
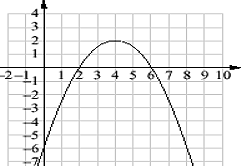
**Factored Form**

**ZEROS OF A POLYNOMIAL FUNCTION**

**Other Names for Zeros:**

**Finding zeros on a graph of a polynomial function:**

**Zeros are the \_\_\_\_\_\_\_\_\_\_\_\_\_ where \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

****

**Zeros:**

**X-intercepts:**

**Zeros:**

**X-intercepts:**

**Zeros:**

**x =**

**x =**

**X-intercepts:**

**Factors, Roots, Zeros**

**Example:**

1. **Solve by setting each factor = 0**
2. **Factor**
3. **Write Equation**

Remember! Only ONE factor needs to be zero in order for the product to be zero.

Let’s work on just the “solving” part. Here we are finding the zeros of the polynomial algebraically.

**Try These:**

**Bonus! If you were to graph these polynomials, what would the x-intercepts be?**

**1)**

**2)**

**3)**

**4)**

**5)**

**6)**

**7)**

**8)**

**9)**

**10)**