Warm Up: Unit 3 Polynomial Functions and Equations Algebra 2 Kitt

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period:\_\_\_\_\_

**3.1 Monomials and Laws of Exponents**

*Directions: Simplify the monomials.*

1. 2. 3.

**3.2 Characteristics and Operations on Polynomials**

*Directions: Rearrange the terms so that the polynomials are in descending order. State the a) degree; b) number of terms; c) the leading coefficient for each of the following polynomials.*

4.  5. 

*Directions: Perform the indicated operation on the polynomials.*

6. 7.

8. 10.

**3.3 Long Division and Synthetic Division**

*11. Find the quotient using Long division: (Hint: Remember)*

*12. Find the quotient using synthetic division:*

**3.4 Factor and Solve Polynomial Equations**

*Directions: Factor and solve the Polynomial Equations*

13. 14.