Polynomials Study Guide

1. Know the properties of exponents and how to apply the properties

   Practice Problems: Page 326; 9 – 47 all

2. Given an equation of a polynomial function, describe the end behavior

   Practice Problems: Page 333; 8 – 13, 53 – 64

3. Given an equation of a polynomial function, graph the equation. Identify turning points, least degree, end behavior, domain, range, local minimum, local maximum, increasing and decreasing intervals.

   Practice Problems: Page 335; 65 – 79

4. Add, Subtract, and Multiply Polynomials

   Practice Problems: Page 341; 13 – 71

5. Factor a Polynomial

   Practice Problems: Page 348; 13 – 58

6. Given a polynomial equation, solve the equation

   Practice Problems: 348; 68 – 85

7. Divide Polynomials using Synthetic Division

   Practice Problems: Page 356; 27 – 38

8. Use the Rational Root Theorem to find the zeros of a polynomial function

   Practice problems: Page 363; 33 – 44

9. Given the zeros of a polynomial function, write a polynomial equation

   Practice Problems: Page 370; 35 – 46

10. Given a graph of a polynomial function, identify the zeros of the function, local minimum, local maximum, least degree of the function, and end behavior.

    Practice Problems: Page 377; 23 – 28

11. Solve polynomial inequalities algebraically and graphically.