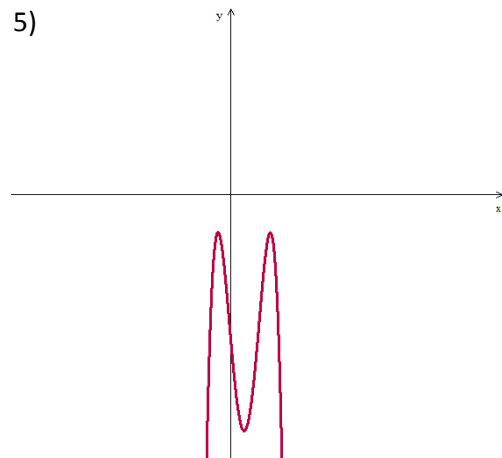
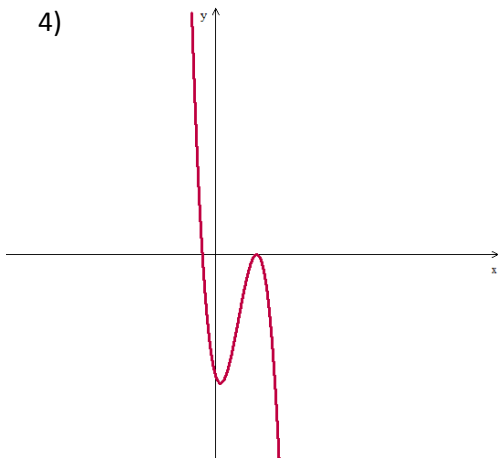
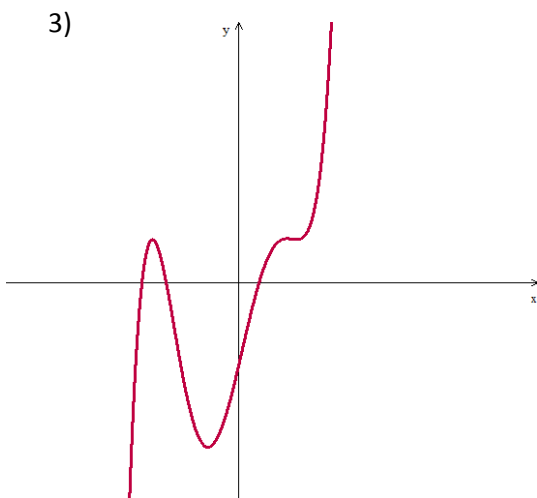
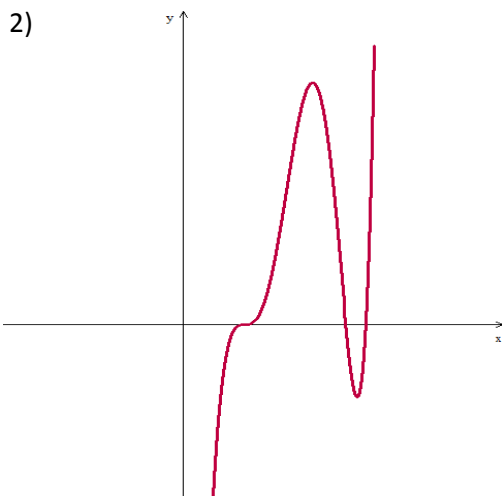


Solving Polynomials with Complex Roots

Name: _____

1) Briefly describe the steps used to find the roots of polynomials that have both real and imaginary solutions. Use complete sentences.

Determine the minimum degree possible for the polynomial. Identify the least number of imaginary roots for each graph.



Find all zeros using the calculator, synthetic division, and the quadratic formula.

$$6) 2x^3 + 3x^2 + 3x + 2 = 0$$

$$7) x^4 - 2x^3 - 15x^2 - 18x - 216 = 0$$

$$8) x^4 - 3x^3 + 5x^2 - 16x + 20 = 0$$

$$9) x^4 + 4x^3 + 5x^2 + 2x - 12 = 0$$