

Pre-Cal Chapter 2 Concepts to know

- Factoring (including sum and difference of perfect cubes)
- Finding the vertex from standard form $(-b/2a)$
- Putting in vertex form by completing the square
- Graphing parabola's from standard form and vertex form
- Writing the equation of a parabola given the vertex and point / given x- intercepts
- Leading Coefficient Test to describe end behavior
- Sketching polynomials given factors
- Writing polynomials given zeros/roots (radical and imaginary numbers come in conjugate pairs)
- Synthetic division
- Long division
- Remainder Theorem
- Factor Theorem
- Rational Root Theorem (p/q method)
- Powers of i and simplifying square root of a negative number
- Complex numbers (adding, subtracting, multiplying, and dividing – multiplying by the conjugate)
- Asymptotes – Vertical, Horizontal, Slant
- Points of Removable Discontinuity (holes)
- Graphing Rational Functions