Precalculus (NVC Math 106/108)	Integrated Math 3/Trig (harder problems + highlight)
Math 106 1. Functions a. Function notation, domain and range, interval notation, composition, transformations, absolute value, inverses, parent graphs 2. Linear Functions a. Graphs, modeling, fitting models to data 3. Polynomial and Rational Functions a. Complex numbers, quadratic equations, quadratic graphs, quadratic modeling, power and polynomial functions, arithmetic with polynomials, graphs of polynomials, dividing polynomials, zeroes, solve polynomial equations, rational functions, solve rational equations, graph rational functions, inverses and radical functions 4. Exponential and Logarithmic Functions a. Exponent rules review, exponential functions, logarithmic functions, graphing exp and log, log properties, exp and log equations, exp and log models 5. Systems of Equations and Inequalities a. Two variable systems, three variable systems, systems of nonlinear equations, partial fractions, matrices and matrix operations, solving systems using Gaussian elimination 6. Series a. sequences and notation, arithmetic, geometric, series and notations Math 108 7. Trigonometric Functions a. Angles in the plane, the Unit Circle, all six trig functions, right triangle trig 8. Periodic Functions a. Graphs of all six trig functions, inverse trig functions, model with trig functions 9. Trig Identities and Equations a. Solve equations with identities, sum and difference, double-angle, half-angle, sum-to-product, product-to-sum, solve trig equations, modeling trig equations 10. Applications of Trig a. Law of sines, law of cosines, polar coordinates, polar grid, parametric equations, parametric graphs	1. Linear and Quadratic Functions a. Parent graphs, transforming linear and absolute value, modeling with linear, solving liner systems, transformation with quadratics, modeling with quadratics 2. Polynomial Functions a. Graphing polynomials, add/subtract/multiply polynomials, divide polynomials, solve polynomial equations, transforming polynomial functions 3. Rational Exponents and Radical Functions a. nth roots and rational exponents, properties of rational exponents and radicals, graphing radicals, solving radical equations, function operations, inverse of a function 4. Exponential and Logarithmic Functions a. Exp and log functions, graphing exp and log, log properties, exp and log equations, model with exp and log 5. Rational Functions a. Inverse variation, graphing rational functions, multiply/divide rational expressions, add/subtract rational expressions 6. Sequences and Series a. Using sequences and series, arithmetic sequences and series, geometric sequences and series 7. Trig Ratios and Functions a. Right triangle trig, angles and radians, trig functions of any angle, the Unit Circle, graph all six trig functions, transformations with all six trig functions, model with trig functions 8. Trig Identities and Formulas a. Use basic identities, sum and difference formulas, law of sines, law of cosines, solve trig equations