

## MATH 21

(GQ) College Algebra I (3) Quadratic equations; equations in quadratic form; word problems; graphing; algebraic fractions; negative and rational exponents; radicals.

Prerequisite: [MATH 004](#) or satisfactory performance on the mathematics proficiency examination

### TOPICS

Factoring

Simplifying Rational Expressions

Rational Expression Operations ( $\times$  and  $\div$ )

Rational Expressions (+ and -)

Rational Expressions, Complex Fractions

Fractional Equations

More Fractional Equation & Applications

Using Integers as Exponents

Roots & Radicals

Combining & Simplifying Radicals

Products and Quotients with Radicals

Equations with Radicals

Merging Exponents and Roots

Complex Numbers

Quadratic Equations

Completing the Square

Quadratic Formula

More Quad Equations & Applications

Interval Notation Review

Quadratic & Nonlinear Inequalities

Graphing Parabolas

More Parabolas & Circles

Graphing Ellipses

Graphing Hyperbolas

Systems of Equations

Elimination Method