







ALGEBRA 1

Course overview * Skill Set







In no particular order

The placement exam is cumulative. The exam will cover the following skills.





Some basics:

-  Order of operations
-  Solve a proportion
-  Percent problems
-  Percent of change
-  Area of a Rectangle
-  Add fractions
 - Know when a fraction is undefined






Equation Solving:

-  Solve a multi-step equation
-  Factor and solve
-  Solving Squared quantities equations
-  Absolute value equations
-  Quadratic formula to solve
-  Isolating a variable in an equation or formula




Inequalities

-  Solve inequalities
-  Graph solution set
-  Compound inequalities
-  Absolute value inequalities






Exponents:

-  Multiplication & division properties
-  Power to a power
-  Negative exponents
-  Zero exponents
-  Multiplication & Division of fractions with exponents



Radicals and radical expressions:

-  Simplifying Radicals
-  Add, subtract, multiply and divide
-  Rationalize the denominator












Polynomials:

-  Add
-  Subtract
-  Multiply
-  Divide by a monomial
-  Factor completely




Rational Expressions

-  Simplify Rational Expressions
-  Multiply and Divide Rational Expressions

Graphing on Coordinate plane:

-  Graph a line
-  Test if a given point is on the line by plugging it in to the equation
-  Find x & y intercepts
-  Changing linear equations
 - Standard form
 - Slope intercept form
-  Write an equation for line passing through two points
-  Writing an equation given a graph
-  Parallel lines - writing equations
-  Slope intercept form
-  Slope formula
-  Point-Slope form
-  Graph a linear inequality

Systems of equations:

-  Solve a system by either...
 - Elimination Method
 - Substitution Method
-  Graph a system
-  Graph a System of Linear Inequalities