

Algebra 1 Mathematics Content Standards

Students will...

- 1.0** Use properties of and operations on sets of numbers.
- 2.0** Use rules of exponents.
- 3.0** Solve equations and inequalities involving absolute values.
- 4.0** Simplify linear expressions.
- 5.0** Solve multi-step problems, including word problems, and explain method.
- 6.0 Graph linear equations/inequalities and compute the x- and y-intercepts.
- 7.0 Use point-slope formula and verify a point is on a line.
- 8.0 Use slopes and equations of parallel and perpendicular lines.
- 9.0 Solve systems of equations/inequalities both algebraically and graphically.
- 10.0** Use basic arithmetic operations on polynomials, including word problems.
- 11.0** Factor polynomials.
- 12.0 Simplify rational expressions.
- 13.0 Use operations on equations involving rational expressions.
- 14.0 Solve quadratic equations.
- 15.0** Solve rate, work and mixture problems.
- 16.0 Understand concepts of relations/functions.
- 17.0 Determine the domain and range of relations.
- 18.0 Determine if a relation is a function.
- 19.0 Know the quadratic formula and be familiar with its proof.
- 20.0 Use the quadratic formula to solve an equation.
- 21.0 Graph quadratic functions & know roots are intercepts.
- 22.0 Relate quadratic graphs with the number of roots.
- 23.0 Apply quadratic equations to physics.
- 24.0** Know deductive, inductive reasoning and logical arguments.
- 25.0** Judge the validity of results and arguments; check work.

Algebra 1B content denoted by lightened test