Virginia Standards of Learning Assessment
Algebra I Performance Level Descriptors

Fail/Does Not Meet	Pass/Proficient	Pass/Advanced
A student performing at this level should be able to: • Identify verbal phrases that represent algebraic expressions, and substitute values into expressions. • Identify the square roots of perfect squares. • Identify the solutions to quadratic and multistep linear equations. • Identify the solutions to systems of equations graphically. • Perform operations on polynomials using concrete and pictorial representations. • Identify the slope and y-intercept of a graph or line in slope-intercept form. • Find slope of a line given two points on a graph.	A student performing at this level should be able to: • Translate between verbal and algebraic expressions, and evaluate expressions given replacement values. • Simplify square roots and cube roots of whole numbers and square roots of monomial expressions. • Perform operations and use the laws of exponents on polynomials. • Completely factor polynomials. • Find solutions and justify steps when solving quadratic and multistep linear equations, and systems of equations and inequalities. • Graph a line given the equation in slope-intercept form and vice versa.	A student performing at this level should be able to: • Represent and evaluate real-world quantitative situations verbally and algebraically. • Simplify monomial and polynomial expressions. • Discriminate between methods to efficiently factor polynomials. • Interpret, model, and justify steps when finding solutions to situations represented by quadratic and multistep linear equations, and systems of equations and inequalities. • Demonstrate multiple representations of functions.

Fail/Does Not Meet	Pass/Proficient	Pass/Advanced
- Determine whether a relation is a function. - Calculate statistical measures. - Identify a curve of best fit for a set of data. - Identify direct variations from a graph.	- Generate the slope-intercept form of a line given two points or one point and slope. - Determine domain, range, zeros and x- and y-intercepts of functions, whether a relation is a function, and identify multiple representations of functions. - Calculate and interpret statistical measures. - Find a curve of best fit for a set of data. - Represent direct and inverse variation relationships.	- Describe the effects of function transformations. - Graph a line given the equation in various forms and vice versa. - Generate the equation of a line in various forms given two points or one point and slope. - Calculate and analyze statistical measures for a set of data. - Model and make predictions for a set of data using the curve of best fit. - Analyze models of direct and inverse variation to generate conclusions.