State of Texas Assessments of Academic Readiness (STAAR®) Performance Level Descriptors Algebra I

Performance Level Descriptors

The mathematical process skills describe ways in which students are expected to engage in the content. They are not assessed in isolation but are incorporated into questions that assess Algebra I content. The process skills focus on applying mathematics to solve problems, analyze mathematical relationships, and communicate mathematical ideas.

Students achieving Masters Grade Level Performance can

- Evaluate the reasonableness of the domain and range of linear functions
- Generate representations of exponential functions
- Make predictions from exponential functions that provide a reasonable fit to data for real-world problems
- Divide polynomial expressions

Students achieving Meets Grade Level Performance can

- Factor and multiply polynomial expressions
- Determine the domain and range of linear, quadratic, and exponential functions
- Calculate the rate of change of linear functions in mathematical and real-world problems
- Determine solutions to quadratic equations, linear inequalities, and systems of linear equations in mathematical and real-world problems
- Formulate linear and quadratic equations, linear inequalities, and systems of linear equations to solve problems
- Estimate solutions and make predictions from linear and quadratic functions that provide a reasonable fit to data for real-world problems
- Identify attributes of an exponential function from its graph
- Use the properties of exponents

Students achieving Approaches Grade Level Performance can

- Identify solutions to systems of equations and inequalities from a graph
- Factor quadratic expressions
- Determine the domain and range of linear, quadratic, and exponential functions using a graph
- Add and subtract polynomial expressions
- Formulate linear and quadratic equations, linear inequalities, and systems of linear equations
- Generate representations of linear and quadratic functions and linear inequalities
- Analyze the effects of parameter changes on the graph of linear and quadratic parent functions
- Solve a linear equation

Students achieving Did Not Meet Grade Level Performance can

- Identify slopes and y-intercepts of linear functions from tables, graphs, and equations in slope-intercept form
- Identify attributes of a linear or quadratic function from its graph
- Write a linear equation, function, inequality or system of equation given a verbal description
- Simplify a square root expression
- Calculate the rate of change of linear functions from a table or graph