

Algebra I

Seeing Structure in Expressions

A Interpret and use structure. [A1.SSE.A](#)

- 1 Interpret the contextual meaning of individual terms or factors from a given problem that utilizes formulas or expressions. [A1.SSE.A.1](#)
- 2 Analyze the structure of polynomials to create equivalent expressions or equations. [A1.SSE.A.2](#)

Creating Equations

A Create equations that describe linear, quadratic and exponential relationships. [A1.CED.A](#)

- 1 Create equations and inequalities in one variable and use them to model and/or solve problems. [A1.CED.A.1](#)

Reasoning with Equations and Inequalities

A Understand solving equations as a process, and solve equations and inequalities in one variable. [A1.REI.A](#)

- 2c Analyze different methods of solving quadratic equations. [A1.REI.A.2C](#)

C Represent and solve linear and exponential equations and inequalities graphically. [A1.REI.C](#)

- 6 Explain that the graph of an equation in two variables is the set of all its solutions plotted in the Cartesian coordinate plane. [A1.REI.C.6](#)
- 8 Solve problems involving a system of linear inequalities. [A1.REI.C.8](#)

Interpreting Functions

B Interpret linear, quadratic and exponential functions in terms of the context. [A1.IF.B](#)

- 3 Using tables, graphs and verbal descriptions, interpret key characteristics of a function that models the relationship between two quantities. [A1.IF.B.3](#)

C Analyze linear, quadratic and exponential functions using different representations. [A1.IF.C](#)

- 7 Graph functions expressed symbolically and identify and interpret key features of the graph. [A1.IF.C.7](#)

Building Functions

A Build new functions from existing functions (limited to linear, quadratic and exponential). [A1.BF.A](#)

- 1 Analyze the effect of translations and scale changes on functions. [A1.BF.A.1](#)

Linear, Quadratic and Exponential Models

A Construct and compare linear, quadratic and exponential models and solve problems. [A1.LQE.A](#)

- 3 Construct linear, quadratic and exponential equations given graphs, verbal descriptions or tables. [A1.LQE.A.3](#)
-

B Use arithmetic and geometric sequences. [A1.LQE.B](#)

- 4 Write arithmetic and geometric sequences in recursive and explicit forms, and use them to model situations and translate between the two forms. [A1.LQE.B.4](#)
-

Data and Statistics

A Summarize, represent and interpret data. [A1.DS.A](#)

- 1 Analyze and interpret graphical displays of data. [A1.DS.A.1](#)