Missouri Mathematics Priority Standards

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