BCS Algebra I Priority Standards

For a complete list of course standards visit https://tinyurl.com/yauk4leg

Linear Relationships

(A.CED.4) Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. *For example, rearrange Ohm's Law* $V = IR$ *to highlight resistance R.*

(A.REI.3) Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

(A.REI.6) Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

(A.REI.12) Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

(F-IF B6) Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. ⋆

(F.IF.7a) Graph linear and quadratic functions and show intercepts, maxima, and minima. ⋆

(S.ID.7) Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. ⋆

Priority Standards for Exponentials

(F.LE.1c).Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. ⋆

(F.IF.7e) (exponentials only) Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. ⋆

Priority Standards for Quadratics

(A.SSE.3a) Factor a quadratic expression to reveal the zeros of the function it defines.

(A-APR A1) Understand that polynomials form a system of analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

(A.REI.4b) Solve quadratic equations by inspection (e.g., for $x^2 = 49$, taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b.

(F.IF.7a) Graph linear and quadratic functions and show intercepts, maxima, and minima. ⋆

(F.IF.8a) Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.

Priority Standards for Statistics

(S.ID.1) Represent data with plots on the real number line (do plots, histograms, and box plots.) ⋆

(S.ID.6a) Fit a function to the data; use functions fitted to data to solve problems in the context of the data. *Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.* ⋆