Unit 1 – Linear Functions

Review of Function Concepts
- Find the domain and range of a relation.
- Identify if a relation is a function or not.
- Work with function notation & evaluating & solving of functions.
- Work with function notation in application based problems.

Working with Linear Functions
- Use an algebraic & graphic perspective to review fundamental skills (slope, intercepts, convert, evaluate & solve) related to slope-intercept & point-slope forms of linear equations
- Introduce standard form & intercept form of linear equations & relate back foundational skills
- Generate the graphs of these linear functions on technology (TI-84 & DESMOS)
- Graph and analyze linear functions with domain/range limitations
- Extend linear functions to piecewise functions and the absolute value function
- Write equations to model real world scenarios using slope-intercept form of linear functions
- Write equations to model real world scenarios using standard form of linear functions
- Apply function basics like domain and range to real world scenarios

Working with Linear Systems
- Write pairs of equations to model real world scenarios involving two unknowns.
- Reviewing algebraic methods for solving simultaneous linear equations (elimination & substitution)
- Investigate the numbers of solutions that linear systems can have
- Use multiple representations in solving linear systems