Planned Course: Algebra I	Course Number: M304		Department: Math
Unit: Functions (3)	**Grade Level: 7 - 12**		
Estimated Time: 1 course	**Level/Track: Keystone Algebra I**		**Date Approved: 08/22/2016**

PA Academic Standards	► Core Concepts (in question format) • **Skills/Knowledge**	Activities/Strategies/Study Skills (identify some activities as remedial or enrichment activities)	Assessments (include types and topics)
Algebra I Keystone Module 2 – Linear Functions and Data Organizations **Assessment Anchor:** Functions **PA Core Standards:** CC.2.2.8.C.1 Define, evaluate, and compare functions. CC.2.2.8.C.2 Use concepts of functions to model relationships between quantities. CC.2.2.HS.C.1 Use the concept and notation of functions to interpret and apply them in terms of their context. CC.2.2.HS.C.2 Graph and analyze functions and use their properties to make connections between the different representations. CC.2.2.HS.C.3 Write functions or sequences that model relationships between two quantities. CC.2.4.HS.B.2 Summarize, represent, and interpret data on two categorical and quantitative variables. CC.2.1.HS.F.3 Apply quantitative reasoning to choose and interpret units and scales in formulas, graphs, and data displays. CC.2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multi-step problems. CC.2.2.8.B.2 Understand the connections between proportional relationships, lines, and linear equations.	► How can you represent and describe functions? • 3-1 Match simple graphs with situations. • 3-1 Graph a relationship. • 3-2 Identify functions. • 3-2 Find the domain and range of relations and functions. • 3-3 Identify independent and dependent variables. • 3-3 Write an equation in function notation and evaluate a function for given input values. • 3-4 Graph functions given a limited domain. • 3-4 Graph functions given a domain of all real numbers. • 3-5 Create and interpret scatter plots. • 3-5 Use trend lines to make predictions. • 3-6 Recognize and extend an arithmetic sequence. • 3-6 Find a given term of an arithmetic sequence.	► Warm up exercise ► Are You Ready? Intervention and Enrichment ► Exercises in book ► Keystone preparation resources (Study Island, Finish Line, USA Test Prep, Item Sampler, etc.) ► Online tutorial video ► MDC lessons ► Interleave study guide ► Spaced Learning Over Time (SLOT) review	► Quizzes (teacher created) ► Summative chapter tests (common) ► Quarterly assessments (common) ► Graded assignments/projects ► Formative assessments (homework, classwork, questioning, exit tickets, etc.)

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CC.2.2.8.C.1 Define, evaluate, and compare functions. CC.2.2.8.C.2 Use concepts of functions to model relationships between quantities. CC.2.2.HS.C.2 Graph and analyze functions and use their properties to make connections between the different representations. CC.2.2.HS.C.3 Write functions or sequences that model relationships between two quantities. CC.2.2.HS.C.4 Interpret the effects transformations have on functions and find the inverses of functions. CC.2.2.HS.C.6 Interpret functions in terms of the situations they model. CC.2.4.HS.B.2 Summarize, represent, and interpret data on two categorical and quantitative variables.			