

U2 - Statistics and Predictions	U3 - Constructing our World	U4 - Math in Decision Making	Capstone - Starting Business	Supporting	Major	Competencies
S	S	S	M	3	2	QL-A1-A Use variables to accurately represent quantities or attributes in a variety of authentic tasks.
S	M	S	M	2	3	QL-A1-B Predict and then confirm the effect that changes in variable values have in an algebraic relationship.
		S	S	2	0	QL-A1-C Interpret parts of expressions such as terms, factors, and coefficients.
	S		S	2	0	QL-A1-D Write expressions and/or rewrite expressions in equivalent forms to solve problems.
	S		S	2	0	QL-A2-A Perform arithmetic operations (addition, subtraction, multiplication) on polynomials in authentic tasks.
	S		M	1	1	QL-A2-B Demonstrate the relationship between zeros and factors of polynomials.
		M	M	0	2	QL-A3-A Create equations and inequalities that describe numbers or relationships.
				0	1	QL-A3-B Compare and contrast expressions and equations.
		M		0	1	QL-A3-C Use and justify reasoning while solving equations.
			M	0	2	QL-A3-D Develop and solve equations and inequalities in one variable.
	S		M	1	2	QL-FM1-A Use variables in a variety of mathematical contexts to represent quantities or attributes.
	M	M		0	3	QL-FM1-B Predict and then confirm the effect that changes in variable values have in an algebraic relationship
	S		S	3	0	QL-FM1-C Understand the concept of a function
	M			1	1	QL-FM1-D Interpret functions.
	M			0	1	QL-FM1-E Analyze functions using different representations (descriptions, tables, graphs, and equations).

QL_Compencies Across Units

	M			0	1	QL-FM1-F Represent common types of functions using words, algebraic symbols, graphs, and tables.
	M			0	1	QL-FM1-G Identify important characteristics of functions in various representations.
M	S	S	M	2	3	QL-FM2-A Translate problems from a variety of contexts into mathematical representations and vice versa.
			M	1	1	QL-FM2-B Build a function that models a relationship between two quantities.
			M	1	1	QL-FM2-C Build new functions from existing functions.
		M		1	1	QL-FM2-D Construct and compare models such as linear and nonlinear models and use them to solve problems.
		M	M	1	2	QL-FM2-E Interpret expressions for functions in terms of the situation they model.
	M		M	0	2	QL-FM2-F Apply geometric concepts in modeling situations.
M				0	1	QL-FM3-A Identify the reasonableness of a linear model for given data and consider alternative models.
	M			0	1	QL-FM3-B Use reasoning that supports that abstract mathematical models used to characterize real-world scenarios or physical relationships are not always exact and may be subject to error from many sources. (how a mathematical model (or when) a mathematical model does not represent a real world situation physics lab.)
S	S	S	S	5	0	QL-N1-A Demonstrate operation sense and the effects of common operations on numbers in words and symbols.
S	S	S	S	5	0	QL-N1-B Apply mathematical properties in numeric and algebraic contexts.
M			S	1	1	QL-N1-C Use different types of mathematical summaries of data, such as mean, median, and mode.
M		M	M	0	3	QL-N1-D Read, interpret, and make decisions based upon information from various data displays.
	S			1	0	QL-N1-E Demonstrate competency in the use of magnitude in the contexts of place values, fractions, and numbers written in scientific notation.
	S		M	1	1	QL-N1-F Demonstrate measurement sense that includes predicting, estimating, and then solving problems using appropriate units.

QL_Competerencies Across Units

	S	S		2	0	QL-N2-A Perform arithmetic operations on whole numbers, integers, fractions, and decimals including basic operations without a calculator.
		S	M	1	2	QL-N2-B Apply quantitative reasoning to solve problems involving quantities or rates.
M	M	S		2	2	QL-N3-A Use estimation skills.
M	M	S		2	2	QL-N3-B State convincing evidence to justify estimates.
6	10	6	14	44	44	Major
4	12	10	5	43	43	Supporting