Rptg Cat	STAAR	STAAR Modified	Readiness Standards	Supporting Standards
1 Functional Relationships	8	6	A.1.D represent relationships among quantities using concrete models, tables, graphs, diagrams, verbal descriptions, equations, and inequalities A.1.E interpret and make decisions, predictions, and critical judgments from functional relationships	A.1.A describe independent and dependent quantities in functional relationships A.1.B gather and record data and use data sets to determine functional relationships between quantities A.1.C describe functional relationships for given problem situations and write equations or inequalities to answer questions arising from the situations
2 Properties and Attributes of Functions	12	10	A.2.B identify mathematical domains and ranges and determine reasonable domain and range values for given situations, both continuous and discrete A.2.D collect and organize data, make and interpret scatterplots (including recognizing positive, negative, or no correlation for data approximating linear situations), and model, predict, and make decisions and critical judgments in problem situations A.4.A find specific function values, simplify polynomial expressions, transform and solve equations, and factor as necessary in problem situations	A.2.A identify and sketch the general forms of linear ($y = x$) and quadratic ($y = x^2$) parent functions A.2.C interpret situations in terms of given graphs or creates situations that fit given graphs A.3.A use symbols to represent unknowns and variables A.3.B look for patterns and represent generalizations algebraically A.4.B use the commutative, associative, and distributive properties to simplify algebraic expressions A.4.C connect equation notation with function notation, such as $y = x + 1$ and $f(x) = x + 1$
3 Linear Functions	15	12	A.5.C use, translate, and make connections among algebraic, tabular, graphical, or verbal descriptions of linear functions A.6.B interpret the meaning of slope and intercepts in situations using data, symbolic representations, or graphs A.6.C investigate, describe, and predict the effects of changes in m and b on the graph of $y = mx + b$ A.6.F interpret and predict the effects of changing slope and y-intercept in applied situations	A.5.A determine whether or not given situations can be represented by linear functions A.5.B determine the domain and range for linear functions in given situations A.6.A develop the concept of slope as rate of change and determine slopes from graphs, tables, and algebraic representations A.6.D graph and write equations of lines given characteristics such as two points, a point and a slope, or a slope and y-intercept A.6.E determine the intercepts of the graphs of linear functions and zeros of linear functions from graphs, tables, and algebraic representations A.6.G relate direct variation to linear functions and solve problems involving proportional change
4 Linear Equations and Inequalities	10	8	A.7.B investigate methods for solving linear equations and inequalities using concrete models, graphs, and the properties of equality, select a method, and solve the equations and inequalities A.8.B solve systems of linear equations using concrete models, graphs, tables, and algebraic methods	A.7.A analyze situations involving linear functions and formulate linear equations or inequalities to solve problems A.7.C interpret and determine the reasonableness of solutions to linear equations and inequalities A.8.A analyze situations and formulate systems of linear equations in two unknowns to solve problems A.8.C interpret and determine the reasonableness of solutions to systems of linear equations
5 Quadratics and Other Nonlinear Functions	9	7	A.9.D analyze graphs of quadratic functions and draw conclusions A.10.A solve quadratic equations using concrete models, tables, graphs, and algebraic methods	A.9.A determine the domain and range for quadratic functions in given situations A.9.B investigate, describe, and predict the effects of changes in a on the graph of $y = ax^2 + c$ A.9.C investigate, describe, and predict the effects of changes in c on the graph of $y = ax^2 + c$ A.10.B make connections among the solutions (roots) of quadratic equations, the zeros of their related functions, and the horizontal intercepts (x-intercepts) of the graph of the function A.11.A use patterns to generate the laws of exponents and apply them in problem-solving situations A.11.B analyze data and represent situations involving inverse variation using concrete models, tables, graphs, or algebraic methods A.11.C analyze data and represent situations involving exponential growth and decay using concrete models, tables, graphs, or algebraic methods
STAAR	54 (5 Grid)		**32-35 questions from Readiness Standards**	**19-22 questions from Supporting Standards**
STAAR Modified		42 (1 Grid)	*26-28 questions from Readiness Standards*	*15-17 questions from Supporting Standards*