

RC	#	R/S	TEKS	STANDARD DESCRIPTION	OLD	NOTES
1 Number and Algebraic Methods	11 QUESTIONS	S	A.10A	add and subtract polynomials of degree one and degree two		A.4A
		S	A.10B	multiply polynomials of degree one and degree two		A.4A
		S	A.10C	determine the quotient of a polynomial of degree one and polynomial of degree two when divided by a polynomial of degree one and polynomial of degree two when the degree of the divisor does not exceed the degree of the dividend		NEW
		S	A.10D	rewrite polynomial expressions of degree one and degree two in equivalent forms using the distributive property		A.4A
		R	A.10E	factor, if possible, trinomials with real factors in the form $ax^2 + bx + c$, including perfect square trinomials of degree two		A.4A
		S	A.10F	decide if a binomial can be written as the difference of two squares and, if possible, use the structure of a difference of two squares to rewrite the binomial		A.4A
		S	A.11A	simplify numerical radical expressions involving square roots		NEW
		R	A.11B	simplify numeric and algebraic expressions using the laws of exponents, including integral and rational exponent:	A.11A	Rational Exponents
		S	A.12A	decide whether relations represented verbally, tabularly, graphically, and symbolically define a function		A.1B
		S	A.12B	evaluate functions, expressed in function notation, given one or more elements in their domain:		A.4A
		S	A.12C	identify terms of arithmetic and geometric sequences when the sequences are given in function form using recursive processes		NEW
		S	A.12D	write a formula for the n th term of arithmetic and geometric sequences, given the value of several of their term:	A.3B	Geometric sequences
S	A.12E	solve mathematical and scientific formulas, and other literal equations, for a specified variable		A.4A		
2 Describing and Graphing Linear Functions, Equations, and Inequalities	12 QUESTIONS	S	A.3A	determine the slope of a line given a table of values, a graph, two points on the line, and an equation written in various forms, including $y = mx + b$, $Ax + By = C$, and $y - y_1 = m(x - x_1)$		A.6A
		R	A.3B	calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in context of mathematical and real-world problems		A.6B
		R	A.3C	graph linear functions on the coordinate plane and identify key features, including x-intercept, y-intercept, zeros, and slope, in mathematical and real-world problems		A.6A A.6E A.6F
		R	A.3D	graph the solution set of linear inequalities in two variables on the coordinate plane		A.7B
		S	A.3E	determine the effects on the graph of the parent function $f(x) = x$ when $f(x)$ is replaced by $af(x)$, $f(x) + d$, $f(x - c)$, $f(bx)$ for specific values of a , b , c , and d	A.6C A.2A	Horizontal transformations
		S	A.3F	graph systems of two linear equations in two variables on the coordinate plane and determine the solutions if they exist		A.8B
		S	A.3G	estimate graphically the solutions to systems of two linear equations with two variables in real-world problems		A.8B
		S	A.3H	graph the solution set of systems of two linear inequalities in two variables on the coordinate plane		NEW
		S	A.4A	calculate, using technology, the correlation coefficient between two quantitative variables and interpret this quantity as a measure of the strength of the linear association		NEW
		S	A.4B	compare and contrast association and causation in real-world problems		NEW
		S	A.4C	write, with and without technology, linear functions that provide a reasonable fit to data to estimate solutions and make predictions for real-world problems		A.2D A.1C
		3 Writing and Solving Linear Functions, Equations, and Inequalities	14 QUESTIONS	R	A.2A	determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations, both continuous and discrete; and represent domain and range using inequality:
S	A.2B			write linear equations in two variables in various forms, including $y = mx + b$, $Ax + By = C$, and $y - y_1 = m(x - x_1)$, given one point and the slope and given two points		A.6D
R	A.2C			write linear equations in two variables given a table of values, a graph, and a verbal description		A.6D A.1D
S	A.2D			write and solve equations involving direct variation		A.6G
S	A.2E			write the equation of a line that contains a given point and is parallel to a given line		NEW
S	A.2F			write the equation of a line that contains a given point and is perpendicular to a given line		NEW
S	A.2G			write an equation of a line that is parallel or perpendicular to the x- or y-axis and determine whether the slope of the line is zero or undefined		NEW
S	A.2H			write linear inequalities in two variables given a table of values, a graph, and a verbal description		A.1D A.1D
R	A.2I			write systems of two linear equations given a table of values, a graph, and a verbal description		A.8A
R	A.5A			solve linear equations in one variable, including those for which the application of the distributive property is necessary and for which variables are included on both sides		A.7B
S	A.5B			solve linear inequalities in one variable, including those for which the application of the distributive property is necessary and for which variables are included on both sides		A.7B
R	A.5C			solve systems of two linear equations with two variables for mathematical and real-world problems		A.8B A.2B
R	A.6A			determine the domain and range of quadratic functions and represent the domain and range using inequalities		A.9A
4 Quadratic Functions and Equations	11 QUESTIONS			S	A.6B	write equations of quadratic functions given the vertex and another point on the graph, write the equation in vertex form ($f(x) = a(x - h)^2 + k$), and rewrite the equation from vertex form to standard form ($f(x) = ax^2 + bx + c$)
		S	A.6C	write quadratic functions when given real solutions and graphs of their related equation:		NEW
		R	A.7A	graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry	A.9D	Identify vertex & eq of axis/symmetry
		S	A.7B	describe the relationship between the linear factors of quadratic expressions and the zeros of their associated quadratic functions	A.10B	
		R	A.7C	determine the effects on the graph of the parent function $f(x) = x^2$ when $f(x)$ is replaced by $af(x)$, $f(x) + d$, $f(x - c)$, $f(bx)$ for specific values of a , b , c , and d	A.2A A.9B A.9C	Horizontal transformations
		R	A.8A	solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula		A.10A
		S	A.8B	write, using technology, quadratic functions that provide a reasonable fit to data to estimate solutions and make predictions for real-world problems		NEW
		5 Exponential Functions and Equations	6 QUESTIONS	S	A.9A	determine the domain and range of exponential functions of the form $f(x) = abx$ and represent the domain and range using inequalities
S	A.9B			interpret the meaning of the values of a and b in exponential functions of the form $f(x) = abx$ in real-world problems		A.11C
R	A.9C			write exponential functions in the form $f(x) = abx$ (where b is a rational number) to describe problems arising from mathematical and real-world situations, including growth and decay		A.11C
R	A.9D			graph exponential functions that model growth and decay and identify key features, including y-intercept and asymptote, in mathematical and real-world problems		A.11C
S	A.9E			write, using technology, exponential functions that provide a reasonable fit to data and make predictions for real-world problems		A.11C

INDICATES STANDARD IS A READINESS STANDARD (approximately 65% of STAAR EOC exam)

INDICATES STANDARD IS NEW FOR 2015-2016 SCHOOL YEAR