

TAKS Grade 10		RELEAS							
TEK	Student Expectation	TAAS 1999	TAAS 2000	TAAS 2001	TAAS 2002	Algebra EOC 1999	Algebra EOC 2000	Algebra EOC 2001	Algebra EOC 2002
<b>Obj 1</b>	<b>Functional relationships in a variety of ways</b>								
<b>Alg(b1A)</b>	describes independent & dependent quantities in functional relationships								
<b>Alg(b1B)</b>	gathers & records data, or uses data sets, to determine functional (systematic) relationships between quantities					NT	NT	38	
<b>Alg(b1C)</b>	describes functional relationships for given problem situations & writes equations or inequalities to answer questions arising from the situations	32,33	25,29	22,33, 42,43		30	1,10, 11,16	6,30	
<b>Alg(b1D)</b>	represents relationships among quantities using concrete models, tables, graphs, diagrams, verbal descriptions, equations, & inequalities.					NT	31	8,13	
<b>Alg(b1E)</b>	interprets & makes inferences from functional relationships					NT	32	39	
<b>Obj 2</b>	<b>Properties &amp; attributes of functions</b>								
<b>Alg(b2A)</b>	identifies & sketches the general forms of linear ( $y = x$ ) & quadratic ( $y = x^2$ ) parent functions					NT	15,25	31	
<b>Alg(b2B)</b>	(for a variety of situations) identifies the mathematical domains & ranges & determines reasonable domain & range values for given situations					NT	35	NT	
<b>Alg(b2C)</b>	interprets situations in terms of given graphs or creates situations that fit given graphs					8,12,26	27,38	33,37	
<b>Alg(b2D)</b>	(in solving problems) collects & organizes data, makes & interprets scatterplots, & models, predicts, & makes decisions & critical judgments					6,37	3	NT	
<b>Alg(b3A)</b>	uses symbols to represent unknowns & variables								
<b>Alg(b3B)</b>	(given situations) looks for patterns & represents generalizations algebraically	NT	9	2		4,33	20,23	11,15,34	
<b>Alg(b4A)</b>	finds specific function values, simplifies polynomial expressions, transforms & solves equations, & factors as necessary in problem situations					5,15, 16,29	13,24, 26,30	12,19, 24,35	
<b>Alg(b4B)</b>	uses the commutative, associative, & distributive properties to simplify algebraic expressions	NT	8	7					
<b>Obj 3</b>	<b>Linear Functions</b>								
<b>Alg(c1A)</b>	determines whether or not given situations can be represented by linear functions								
<b>Alg((c1B)</b>	determines the domain & range values for which linear functions make sense for given situations					10,13	NT	NT	
<b>Alg(c1C)</b>	translates among & uses algebraic, tabular, graphical, or verbal descriptions of linear functions					14,17, 18,28	6,17,29	2,18	
<b>Alg(c2A)</b>	develops the concept of slope as rate of change & determines slopes from graphs, tables, & algebraic representations					NT	NT	NT	
<b>Alg(c2B)</b>	interprets the meaning of slope & intercepts in situations using data, symbolic representations, or graphs								
<b>Alg(c2C)</b>	investigates, describes, & predicts the effects of changes in $m$ & $b$ on the graph of $y = mx + b$					7,11	18	5	
<b>Alg(c2D)</b>	graphs & writes equations of lines given characteristics such as two points, a point & a slope, or a slope & $y$ -intercept					20	40	NT	
<b>Alg(c2E)</b>	determines the intercepts of linear functions from graphs, tables, & algebraic representations					NT	28	27,28	
<b>Alg(c2F)</b>	interprets & predicts the effects of changing slope & $y$ -intercept in applied situations					NT	NT	9	
<b>Alg(c2G)</b>	relates direct variation to linear functions & solves problems involving proportional change					NT	37	NT	
<b>Obj 4</b>	<b>Linear Equations and Inequalities</b>								
<b>Alg(c3A)</b>	analyzes situations involving linear functions & formulates linear equations or inequalities to solve problems	NT	37	24,34, 39		2,34, 36,40	2,14, 19,39	4,21, 23	

<b>Alg(c3B)</b>	investigates methods for solving linear equations & inequalities using concrete models, graphs, & the properties of equality, selects a method, & solves the equations & inequalities					1,23	9,21	3,16, 32,36	
<b>Alg(c3C)</b>	(for given contexts) interprets & determines the reasonableness of solutions to linear equations & inequalities					39	12	NT	
<b>Alg(c4A)</b>	analyzes situations & formulates systems of linear equations to solve problems					3,9,31	34,36	10,26	
<b>Alg(c4B)</b>	solves systems of linear equations using concrete models, graphs, tables, & algebraic methods					38	33	40	
<b>Alg(c4C)</b>	(for given contexts) interprets & determines the reasonableness of solutions to linear equations					27	NT	NT	
<b>Obj 5</b>	<b>Quadratic &amp; other nonlinear functions</b>								
<b>Alg(d1B)</b>	investigates, describes, & predicts the effects of changes in $a$ on the graph of $y = ax^2$					NT	NT	NT	
<b>Alg(d1C)</b>	investigates, describes, & predicts the effects of changes in $c$ on the graph of $y = x^2 + c$					NT	NT	20	
<b>Alg(d1D)</b>	(for problem situations) analyzes graphs of quadratic functions & draws conclusions								
<b>Alg(d2A)</b>	solves quadratic equations using concrete models, tables, graphs, & algebraic methods					19,21, 22,25	NT	1,7,14 17,22, 25,29	
<b>Alg(d2B)</b>	relates the solutions of quadratic equations to the roots of their functions					31	5	NT	
<b>Alg(d3A)</b>	uses patterns to generate the laws of exponents & applies them in problem-solving situations	NT	NT	16		35	NT	NT	
<b>Obj 6</b>	<b>Geometry &amp; spatial reasoning</b>								
<b>8.6(A)</b>	generate similar shapes using dilations including enlargements & reductions	NT	6	13					
<b>8.6(B)</b>	graph dilations, reflections, & translations on a coordinate plane	NT	NT	NT					
<b>8.7(D)</b>	locate & name points on a coordinate plane using ordered pairs of rational numbers	NT	15	18					
<b>Obj 7</b>	<b>Two- &amp; three-dimensional representations of geometric relationships &amp; shapes</b>								
<b>8.7(A)</b>	draw solids from different perspectives	NT	4,18	19					
<b>8.7(B)</b>	use geometric concepts & properties to solve problems in fields such as art & architecture	9,10, 12,14	24,28	14,28,32 35, 36					
<b>8.7(C)</b>	use pictures or models to demonstrate the Pythagorean Theorem								
<b>Obj 8</b>	<b>Concepts &amp; uses of measurement &amp; similarity</b>								
<b>8.8(A)</b>	find surface area of prisms & cylinders using concrete models & nets (two-dimensional models)	NT	19	12					
<b>8.8(B)</b>	connect models to formulas for volume of prisms, cylinders, pyramids, & cones								
<b>8.8(C)</b>	estimate answers & use formulas to solve application problems involving surface area & volume	1, 3, 19,20	NT	9,25					
<b>8.9(A)</b>	use the Pythagorean Theorem to solve real-life problems	NT	11,17	4					
<b>8.9(B)</b>	use proportional relationships in similar shapes to find missing measurements	NT	12	6					
<b>8.10(A)</b>	describe the resulting effects on perimeter & area when dimensions of a shape are changed proportionally	NT	NT	NT					
<b>8.10(B)</b>	describe the resulting effect on volume when dimensions of a solid are changed proportionally	NT	NT	NT					
<b>Obj 9</b>	<b>Percents, proportional relationships, probability, &amp; statistics in application problems</b>								
<b>8.3(B)</b>	estimate & find solutions to application problems involving percents & proportional relationships such as similarity & rates	4,13,18, 23,24, 36, 37	1,21,50	15,21, 23					
<b>8.11(A)</b>	find the probabilities of compound events (dependent & independent)	16	20	10,11					
<b>8.11(B)</b>	use theoretical probabilities & experimental results to make predictions & decisions	NT	NT	17,38					
<b>8.12(A)</b>	select the appropriate measure of central tendency to describe a set of data for a particular purpose	5,6,11	3,4,16	NT					

<b>8.12(C)</b>	construct circle graphs, bar graphs, & histograms, with & without technology	NT	NT	5					
<b>8.13(B)</b>	recognize misuses of graphical or numerical information & evaluate predictions & conclusions based on data analysis	21	23,27	37,40					
<b>Obj 10</b>	<b>Mathematical processes &amp; tools used in problem solving</b>								
<b>8.14(A)</b>	identify & apply mathematics to everyday experiences, to activities in & outside of school, with other disciplines, & with other mathematical topics								
<b>8.14(B)</b>	use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, & evaluating the solution for reasonableness								
<b>8.14(C)</b>	select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing & checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem								
<b>8.15(A)</b>	communicate mathematical ideas using language, efficient tools, appropriate units, & graphical, numerical, physical, or algebraic mathematical models								
<b>8.16(A)</b>	make conjectures from patterns or sets of examples & nonexamples								
<b>8.16(B)</b>	validate his/her conclusions using mathematical properties & relationships								