

CORRELATION OF ALGEBRA I TEKS TO 7TH AND 8TH GRADE TEKS

Algebra I TEKS	Student Expectations	7 th Grade TEKS	8 th Grade TEKS
First Grading Period			
8.2	The student selects and uses appropriate operations to solve problems and justify solutions.		8.2
c 1 (C)	The student translates among and uses algebraic, tabular, graphical, or verbal descriptions of linear functions.	7.11A, 7.11B	8.12C, 8.4, 8.12B
b 1 (C)	The student describes functional relationships for given problem situations and writes equations or inequalities to answer questions arising from the situations.	7.3B	8.3A
b 1 (D)	The student represents relationships among quantities using concrete models, tables, graphs, diagrams, verbal descriptions, and equations and inequalities.	7.4A, 7.4B	8.4
b 3 (A)	The student uses symbols to represent unknowns and variables.	7.2C, 7.2F	8.2A
b 4 (B)	The student uses the commutative, associative, and distributive properties to simplify algebraic expressions.	7.2F	8.2A
c 2 (G)	The student relates direct variation to linear functions and solves problems involving proportional change.	7.3A, 7.3B	8.3A, 8.3B
c 3 (A)	The student analyzes situations involving linear functions and formulates linear equations or inequalities to solve problems.	7.4A, 7.4B, 7.5A, 7.5B, 7.10B	8.4B, 8.5A, 8.5B, 8.11B
c 3 (B)	The student investigates methods for solving linear equations and inequalities using concrete models, graphs, and the properties of equality, selects a method, and solves the equations and inequalities.	7.A	8.5A
c 3 (C)	For given contexts, the student interprets and determines the reasonableness of solutions to linear equations and inequalities.	7.5A	8.12B, 8.5A, 8.13B
Second Grading Period			
b 1 (A)	The student describes independent and dependent quantities in functional relationships.	7.4A, 7.4B	8.4
b 1 (B)	The student gathers and records data, or uses data sets, to determine functional (systematic) relationships between quantities.	7.11A	8.13A, 8.12B
b 1 (D)	The student represents relationships among quantities using concrete models, tables, graphs, and diagrams, verbal descriptions and equations.	7.4A	8.4
b 1 (E)	The student interprets and makes inferences from functional relationships.	7.4A	8.4
b 2 (B)	For a variety of situations, the student identifies the mathematical domains and ranges and determines reasonable domain and range values for given situations.	7.2G	8.2C
b 2 (D)	In solving problems the student collects and organizes data, makes and interprets scatterplots, and models, predicts, and makes decisions and critical judgments.	7.11B	8.12B

Third Grading Period			
b 1 (A)	The student describes independent and dependent quantities in functional relationships.	7.4A, 7.4B	8.4
b 1 (B)	The student gathers and records data, or uses data sets, to determine functional (systematic) relationships between quantities.	7.11A, 7.11B	8.13A, 8.12B
b 1 (D)	The student represents relationships among quantities using concrete models, tables, graphs, diagrams, verbal descriptions, and equations and inequalities.	7.4A, 7.4B	8.4
b 1 (E)	The student interprets and makes inferences from functional relationships.	7.4A, 7.4B	8.4
b 2 (A)	The student identifies and sketches the general forms of linear ($y = x$) functions.	7.7A	8.7D
b 2 (B)	For a variety of situations, the student identifies the mathematical domains and ranges and determines reasonable domain and range values for given situations.	7.2G	8.2C
b 2 (C)	The student interprets situations in terms of given graphs or creates situations that fit given graphs.	7.8C	8.7B
b 2 (D)	In solving problems, the student collects and organizes data, makes and interprets scatterplots, and models, predicts, and makes decisions and critical judgments.	7.11 B	8.12B
b 3 (B)	Given situations, the student looks for patterns and represents generalizations algebraically.	7.5A	8.5B
c 1 (A)	The student determines whether or not given situations can be represented by linear functions.	7.11A, 7.11B	8.12B, 8.12C, 8.13B
c 1 (B)	The student determines the domain and range values for which linear functions make sense for given situations.	7.3A, 7.3B, 7.11B	8.3B, 8.12B
c 1 (C)	The student translates among and uses algebraic, tabular, graphical, or verbal descriptions of linear functions.	7.5B, 7.11A, 7.11B	8.12C, 8.5, 8.12B
c 2 (A)	The student develops the concept of slopes as rate of change and determines slopes from graphs, tables, and algebraic representations.	7.11A	8.12B
c 2 (B)	The student interprets the meaning of slope and intercepts in situations using data, symbolic representations, or graphs.	7.7A, 7.11 B	8.7D, 8.12B
c 2 (C)	The student investigates, describes, and predicts the effects of change in m and b on the graph of $y = mx + b$.	7.11B	8.12B
c 2 (D)	The student graphs and writes equations of lines given characteristics such as two points, a point and a slope, or a slope and y-intercept.	7.11B	8.12B
c 2 (E)	The student determines the intercepts of linear functions from graphs, tables, and algebraic representations.	7.7A	8.7D
c 2 (F)	The student interprets and predicts the effects of changing slope and y-intercept in applied situations.	7.7B, 7.9	8.6A, 8.10A, 8.6 B
Fourth Grading Period			
d 3 (A)	The student uses patterns to generate the laws of exponents and applies them in problem-solving situations.	7.2F, 7.2 G	8.2A, 8.2C
d 3 (C)	The student analyzes data and represents situations involving exponential growth and decay using concrete models, tables, graphs, or algebraic methods.	7.12B, 7.11 B	8.12A, 8.12B
d 2 (B)	The student uses the Pythagorean Theorem to solve real-life problems.	7.1C, 7.6B	8.7B, 8.9A
Fifth Grading Period			
c 4 (A)	The student analyzes situations and formulates systems of linear equations to solve problems/	7.5B	8.5A
c 4 (B)	The student solves systems of linear equations using concrete models, graphs, tables, and algebraic methods.	7.5B	8.5A
c 4 (C)	For given contexts, the student interprets and determines the reasonableness of solutions to systems of linear equations.	7.2G	8.2C

Sixth Grading Period			
b 2 (A)	The student identifies and sketches the general forms of quadratic ($y = x^2$) parent function.	7.7A	8.7D
b 4 (A)	The student finds specific function values, simplifies polynomial expressions, transforms and solves equations, and factors as necessary in problem situations.	7.2F	8.2A
d 1 (A)	The student determines the domain and range values for which quadratic functions make sense for given situations	7.5A	8.4A
d 1 (B)	The student investigates, describes, and predicts the effects of changes in a on the graph of $y = ax^2$.	7.7B	8.6B
d 1 (C)	The student investigates, describes and predicts the effects of change in c on the graph of $y = x^2 + c$.	7.7B	8.6B
d 1 (B)	For problem situations, the student analyzes graphs of quadratic functions and draws conclusions.	7.5A	8.5A
d 2 (A)	The student solves quadratic equations using concrete models, tables, graphs, and algebraic methods.	7.11B, 7.4A	8.12B, 8.4
d 2 (B)	The student relates the solutions of quadratic equations to the roots of their functions.	7.5A	8.5A
d 3 (B)	The student analyzes data and represents situations involving inverse variation using concrete models, tables, graphs, or algebraic methods.	7.3B	8.3A