

# Correlation from Algebra 1 to Common Core State Standards for Mathematical Content

Lesson	Standard(s)
<b>Chapter 1: Solving Linear Equations</b>	
1.1 Solving Simple Equations	HSA-CED.A.1, HSA-REI.A.1, HSA-REI.B.3
1.2 Solving Multi-Step Equations	HSN-Q.A.1, HSA-CED.A.1, HSA-REI.B.3
1.3 Solving Equations with Variables on Both Sides	HSA-CED.A.1, HSA-REI.B.3
1.4 Solving Absolute Value Equations	HSA-CED.A.1, HSA-REI.B.3
1.5 Rewriting Equations and Formulas	HSA-CED.A.4
<b>Chapter 2: Solving Linear Inequalities</b>	
2.1 Writing and Graphing Inequalities	HSA-CED.A.1
2.2 Solving Inequalities Using Addition or Subtraction	HSA-CED.A.1, HSA-REI.B.3
2.3 Solving Inequalities Using Multiplication or Division	HSA-CED.A.1, HSA-REI.B.3
2.4 Solving Multi-Step Inequalities	HSA-CED.A.1, HSA-REI.B.3
2.5 Solving Compound Inequalities	HSA-CED.A.1, HSA-REI.B.3
2.6 Solving Absolute Value Inequalities	HSA-CED.A.1, HSA-REI.B.3
<b>Chapter 3: Graphing Linear Functions</b>	
3.1 Functions	HSF-IF.A.1
3.2 Linear Functions	HSA-CED.A.2, HSA-REI.D.10, HSF-IF.B.5, HSF-IF.C.7a, HSF-LE.A.1b
3.3 Function Notation	HSA-CED.A.2, HSF-IF.A.1, HSF-IF.A.2, HSF-IF.C.7a, HSF-IF.C.9
3.4 Graphing Linear Equations in Standard Form	HSA-CED.A.2, HSF-IF.C.7a
3.5 Graphing Linear Equations in Slope-Intercept Form	HSA-CED.A.2, HSF-IF.B.4, HSF-IF.C.7a, HSF-LE.B.5
3.6 Transformations of Graphs of Linear Functions	HSF-IF.C.7a, HSF-BF.B.3
3.7 Graphing Absolute Value Functions	HSA-CED.A.2, HSA-REI.D.10, HSF-IF.C.7b, HSF-BF.B.3

**Lesson****Standard(s)****Chapter 4: Writing Linear Functions**

4.1	Writing Equations in Slope-Intercept Form	HSA-CED.A.2, HSF-BF.A.1a, HSF-LE.A.1b, HSF-LE.A.2
4.2	Writing Equations in Point-Slope Form	HSA-CED.A.2, HSF-BF.A.1a, HSF-LE.A.1b, HSF-LE.A.2
4.3	Writing Equations of Parallel and Perpendicular Lines	HSA-CED.A.2, HSF-LE.A.2
4.4	Scatter Plots and Lines of Fit	HSF-LE.B.5, HSS-ID.B.6a, HSS-ID.B.6c, HSS-ID.C.7
4.5	Analyzing Lines of Fit	HSF-LE.B.5, HSS-ID.B.6a, HSS-ID.B.6b, HSS-ID.B.6c, HSS-ID.C.7, HSS-ID.C.8, HSS-ID.C.9
4.6	Arithmetic Sequences	HSF-IF.A.3, HSF-BF.A.1a, HSF-BF.A.2, HSF-LE.A.2
4.7	Piecewise Functions	HSA-CED.A.2, HSA-REI.D.10, HSF-IF.C.7b

**Chapter 5: Solving Systems of Linear Equations**

5.1	Solving Systems of Linear Equations by Graphing	HSA-CED.A.3, HSA-REI.C.6
5.2	Solving Systems of Linear Equations by Substitution	HSA-CED.A.3, HSA-REI.C.6
5.3	Solving Systems of Linear Equations by Elimination	HSA-CED.A.3, HSA-REI.C.5, HSA-REI.C.6
5.4	Solving Special Systems of Linear Equations	HSA-CED.A.3, HSA-REI.C.6
5.5	Solving Equations by Graphing	HSA-CED.A.3, HSA-REI.D.11
5.6	Graphing Linear Inequalities in Two Variables	HSA-CED.A.3, HSA-REI.D.12
5.7	Systems of Linear Inequalities	HSA-CED.A.3, HSA-REI.D.12

# Correlation from Algebra 1 to Common Core State Standards for Mathematical Content *(continued)*

Lesson	Standard(s)
<b>Chapter 6: Exponential Functions and Sequences</b>	
6.1 Properties of Exponents	HSN-RN.A.2
6.2 Radicals and Rational Exponents	HSN-RN.A.1, HSN-RN.A.2
6.3 Exponential Functions	HSA-CED.A.2, HSF-IF.B.4, HSF-IF.C.7e, HSF-IF.C.9, HSF-BF.A.1a, HSF-BF.B.3, HSF-LE.A.1a, HSF-LE.A.2
6.4 Exponential Growth and Decay	HSA-SSE.B.3c, HSA-CED.A.2, HSF-IF.C.7e, HSF-IF.C.8b, HSF-BF.A.1a, HSF-LE.A.1c, HSF-LE.A.2
6.5 Solving Exponential Equations	HSA-CED.A.1, HSA-REI.A.1, HSA-REI.D.11
6.6 Geometric Sequences	HSF-IF.A.3, HSF-BF.A.2, HSF-LE.A.2
6.7 Recursively Defined Sequences	HSF-IF.A.3, HSF-BF.A.1a, HSF-BF.A.2, HSF-LE.A.2
<b>Chapter 7: Polynomial Equations and Factoring</b>	
7.1 Adding and Subtracting Polynomials	HSA-APR.A.1
7.2 Multiplying Polynomials	HSA-APR.A.1
7.3 Special Products of Polynomials	HSA-APR.A.1
7.4 Solving Polynomial Equations in Factored Form	HSA-APR.B.3, HSA-REI.B.4b
7.5 Factoring $x^2 + bx + c$	HSA-SSE.A.2, HSA-SSE.B.3a
7.6 Factoring $ax^2 + bx + c$	HSA-SSE.A.2, HSA-SSE.B.3a
7.7 Factoring Special Products	HSA-SSE.A.2, HSA-SSE.B.3a
7.8 Factoring Polynomials Completely	HSA-SSE.A.2, HSA-SSE.B.3a
<b>Chapter 8: Graphing Quadratic Functions</b>	
8.1 Graphing $f(x) = ax^2$	HSA-CED.A.2, HSF-IF.C.7a, HSF-BF.B.3
8.2 Graphing $f(x) = ax^2 + c$	HSA-CED.A.2, HSF-IF.C.7a, HSF-BF.B.3
8.3 Graphing $f(x) = ax^2 + bx + c$	HSA-CED.A.2, HSF-IF.C.7a, HSF-IF.C.9
8.4 Graphing $f(x) = a(x - h)^2 + k$	HSA-CED.A.2, HSF-IF.B.4, HSF-BF.A.1a, HSF-BF.B.3
8.5 Using Intercept Form	HSA-SSE.B.3a, HSA-APR.B.3, HSA-CED.A.2, HSF-IF.B.4, HSF-IF.C.8a, HSF-BF.A.1a
8.6 Comparing Linear, Exponential, and Quadratic Functions	HSF-IF.B.6, HSF-BF.A.1a, HSF-LE.A.3

**Lesson****Standard(s)****Chapter 9: Solving Quadratic Equations**

9.1	Properties of Radicals	HSN-RN.A.2, HSN-RN.B.3
9.2	Solving Quadratic Equations by Graphing	HSA-REI.D.11, HSF-IF.C.7a
9.3	Solving Quadratic Equations Using Square Roots	HSA-CED.A.1, HSA-CED.A.4, HSA-REI.B.4b
9.4	Solving Quadratic Equations by Completing the Square	HSA-SSE.B.3b, HSA-CED.A.1, HSA-REI.B.4a, HSA-REI.B.4b, HSF-IF.C.8a
9.5	Solving Quadratic Equations Using the Quadratic Formula	HSA-CED.A.1, HSA-REI.B.4a, HSA-REI.B.4b
9.6	Solving Nonlinear Systems of Equations	HSA-REI.C.7, HSA-REI.D.11

**Chapter 10: Radical Functions and Equations**

10.1	Graphing Square Root Functions	HSA-CED.A.2, HSF-IF.B.4, HSF-IF.B.6, HSF-IF.C.7b, HSF-IF.C.9
10.2	Graphing Cube Root Functions	HSA-CED.A.2, HSF-IF.B.4, HSF-IF.B.6, HSF-IF.C.7b, HSF-IF.C.9
10.3	Solving Radical Equations	HSA-CED.A.1
10.4	Inverse of a Function	HSF-BF.B.4a

**Chapter 11: Data Analysis and Displays**

11.1	Measures of Center and Variation	HSS-ID.A.3
11.2	Box-and-Whisker Plots	HSS-ID.A.1, HSS-ID.A.3
11.3	Shapes of Distributions	HSS-ID.A.1, HSS-ID.A.2, HSS-ID.A.3
11.4	Two-Way Tables	HSS-ID.B.5
11.5	Choosing a Data Display	HSS-ID.A.1