

ALGEBRA 1 PACING WITH COMMON CORE

(Revised Summer 2012)

Lesson	Objective	Days	Level	Common Core
Chapter 1: Tools of Algebra		10		
Skills	Fraction Review (pp. 726-727)	1	M/A	
1-4	Adding real numbers (No matrices)	1	M/A	
1-5	Subtracting real numbers			
1-6	Multiplying and dividing real numbers			
1-2	Simplify expressions that involve exponents and order of operations	2	D/T	
	Assessment 1: 1-2, 1-4, 1-5, 1-6	1		
1-3	Name and recognize irrational numbers (explain: sum/product of 2 rational = rational and sum/product of rational and irrational = irrational)	2	D/T	N-RN3
1-7	Simplify expressions using the Distributive Property	2	D/T	A-SSE1
1-8	Properties of real numbers (Emphasize identity of properties)		M/A	
	Assessment 2: 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8	1		
Chapter 2: Solving Equations		13		
2-1	Solving one-step equations	3	M/A	
2-2	Solve a two-step equation including word problems		D/T	A-REI1 A-CE1
	Assessment 3: 1-3, 1-7, 1-8, 2-1, 2-2	1		
2-3	Solve a multi-step equation including word problems	3	D/T	A-REI1 A-CE1
2-4	Solve an equation with variables on both sides including word problems	3	D/T	A-REI1 A-CE1
	Assessment 4: 2-1, 2-2, 2-3, 2-4	1		
2-6	Solve a formula for a given variable with two steps	2	D/T	A-CED4
Chapter 3: Solving Inequalities		9		
3-1	Graph inequalities	1	D/T	
	Assessment 5: 2-3, 2-4, 2-6, 3-1	1		
3-2	Solving inequalities using addition and subtraction	1	M/A	A-CED1
3-3	Solving inequalities using multiplication and division	1	M/A	A-REI3
3-4	Solve a two-step inequality	2	D/T	A-REI1 A-REI3
	Assessment 6: 2-6, 3-1, 3-2, 3-3, 3-4	1		
3-6	Absolute value equations (no inequalities)	2	I/D	A-REI3 F-IF4

Chapter 4: Solving and Applying Proportions		4		
4-3	Percents	2	M/A	
4-4	Percent of change	1	M/A	
	Assessment 7: 3-2, 3-3, 3-4, 3-6, 4-3, 4-4	1		
	WKCE Review	3		
	Q1 Assessment (Chapters 1-4)	1		
Chapter 5: Graphs and Functions		11		
5-1	Relating graphs to events	1	D	F-LE1
5-2	Relations and functions	2	I/D	F-IF1 F-IF2 F-IF3
End Q1 - Start Q2	Assessment 8: 5-1, 5-2	1		
5-3	Graph a function given a table of values (Identify as linear or non-linear)	2	D/T	A-REI10 F-IF4
5-4	Writing a function rule	1	I/D	A-CED2
5-5	Direct variation	1	I/D	
	Assessment 9: 5-1, 5-2, 5-3, 5-4, 5-5	1		
5-6	Describing number patterns (Recursive and explicit formulas)	2	M/A	F-IF3 F-BF2 F-LE2
Chapter 6: Linear Equations and Their Graphs		17		F-IF4
6-1	Identify slope given a line or two points	2	D/T	F-IF6 F-E1a,b
	Assessment 10: 5-3, 5-4, 5-5, 5-6, 6-1	1		
6-2	Use slope-intercept form of a line to identify slope and y-intercept and graph line	3	D/T	A-CED2 F-BF3 F-LE2 F-LE5
6-3	Standard form	2	I/D	A-CED2 F-IF9 F-LE5
	Assessment 11: 5-6, 6-1, 6-2, 6-3	1		
6-4	Point-slope form and writing linear equations	2	I/D	A-CED2 F-LE5 F-IFI6
6-5	Parallel and perpendicular lines (Geometry problems #60-65)	3	I/D	A-CED2 F-LE5
	Assessment 12: 6-2, 6-3, 6-4, 6-5	1		
6-6	Scatter plot and line of best fit (estimate by hand and equation from calculator)	2	D/T	A-CED2 F-LE5 S-ID9 S-ID1
Chapter 7: Systems of Equations and Inequalities		10		
7-1	Solving systems by graphing Linear and Quadratic (on graphing calculator)	2	I/D	A-REI6 A-REI7 A-REI11
	Assessment 13: 6-4, 6-5, 6-6, 7-1	1		
7-2	Solving systems using substitution	3	I/D	A-CED3
7-3	Solving systems using elimination (include applications)	3	I/D	A-REI5 A-CED3

	Assessment 14: 6-6, 7-1, 7-2, 7-3	1		
	Q2 Assessment 3-6, 4-3, 4-4 and Chapters 5-7	1		
	Semester 2 Exam and Review Chapters 1-7	3		
END OF SEMESTER 1				
7-5	Linear inequalities		EXT.	A-REI12
7-6	Systems of linear inequalities		EXT.	A-REI12
Ch 7	Review, Open-notes Test	2	---	
Chapter 8: Exponents and Exponential Functions		17		
8-1	Simplify expressions with zero and negative exponents	2	D/T	
8-2/8-3	Multiply numbers written in scientific notation	3	D/T	
8-3	Simplify expressions using multiplication property of exponents		D/T	A-SSE3C
8-4	More multiplication properties of exponents	2	I/D	
8-5	Simplify expressions using division property of exponents	2	D/T	
8-5	Divide numbers written in scientific notation	2	D/T	
8-6	Geometric sequences (Derive formula for the sum of a finite geometric series and use to solve problems)	1	D	F-IF3 F-BF2 F-LE1 A-SSE4
8-7	Exponential functions	1	I	F-IF9
8-8	Exponential Growth and Decay	1	I	F-IF8 F-IF8b F-IF1a
	Radicals and Rational Exponents (Rewrite expressions involving radicals and rational exponents using the properties of exponents)			N-RN1 N-RN2
	Graphing Radical Functions			F-LE1c
Chapter 9: Polynomials and Factoring		15		
9-1	Simplify expressions by adding and subtracting polynomials	2	D/T	A-APR1
9-2	Factor a polynomial by using GCF	2	D/T	
9-3	Simplify expressions by multiplying binomials	2	D/T	A-APR1
9-4	Multiplying special cases	1	I	A-SSE2 A-SSE3
9-5	Factor a trinomial in form $x^2 + bx + c$	3	I/D/T	
9-6	Factoring trinomials of the type $ax^2 + bx + c$	1	I	
9-7	Factoring special cases	1	I	
Ch 9	Review, Quizzes, Test	3	---	
Chapter 10: Quadratic Equations and Functions		14		F-IF4 A-REI4
10-1	Exploring quadratic graphs	2	I/D	F-IF7A

10-2	Quadratic functions	2	I/D	I-IF9 F-BF3
10-4	Solving quadratic equations	2	I	
10-5	Factoring to solve quadratic equations	3	I/D	F-IF8a A-SSE3a
10-6	Completing the square (Complete the square in a quadratic expression to identify the max/min)			A-SSE3
10-7	Using the quadratic formula	2	I/D	
10-9	Distinguish between situations that are linear and exponential			F-LE1a
Ch 10	Review, Quizzes, Test (open notes)	3	---	
Chapter 11: Radical Expressions and Equations		7		
Chapter 12: Rational Expressions and Functions				
11-1	Simplifying radicals	2	I/D	
11-2	The Pythagorean Theorem	1	D	
11-7	Trigonometric ratios	2	D	
12-1	Inverse variations	1	I/D	
Ch 11/12	Quiz	1	---	

Statistics and Probability

2-7	Using measures of central tendency	1	M/A	N-Q1 S-ID1 S-ID2
12-8	Counting methods and permutations	3	D	
12-9	Combinations			
4-5	Applying ratios to probability	1	M/A	delete? Geometry?
4-6	13: Recognize dependent/independent events	1	D/T	delete? Geometry?
4-6	Probability of compound events	1	D	delete? Geometry?
4-1	11: Convert rates using dimensional analysis	3	D/T	N-Q1 Move to Geom?