

San Jose Unified School District

Geometry Pacing Calendar

2009-2010

SJUSD GEOMETRY PACING GUIDE FOR 2009-2010

The Geometry curriculum has been broken into twelve units and four benchmark tests, as outlined below.

Each of the four benchmark tests is each designed to be completed in two periods. Several days of review have been built into the calendar prior to each assessment, and five days after the assessment to re-teach, review and enrich missed material. Each exam emphasizes all of the state content standards. The first benchmark assessment is to be used as a *baseline* test. The fourth benchmark assessment is designed to identify areas of focus for the CST review sessions.

► There will be 4 benchmark exams over the course of the year. They will be administered over two days (as determined by the school site) during the following testing periods:

Benchmark 1:	August 24 - 28	— two-period exam
Benchmark 2:	October 5 - 9	— two-period exam
Benchmark 3:	November 30 – December 4 (Dec. 16, 17, 18 – Final exams for high schools)	— two-period exam
Benchmark 4:	February 8 - 12 (June 1, 2, 3 – Final exams for high schools)	— two-period exam

► No calculators of any kind may be used on any of the benchmark exams.

► Starred standards make up 70 percent of the CST. Teachers should aim to cover all 22 geometry standards before the CST.

► Spiraling will be a major key to success on student achievement and on the benchmark exams.

► The purpose of the pacing calendar and benchmark tests is to promote standards based teaching in preparation for the STAR/CST.

CLARIFICATIONS

Calculators and Technology:

Calculators are prohibited on all benchmark exams as they are not permitted on the CST. Use of graphing calculators throughout the year for exploration and demonstration purposes is highly recommended. Geometer's Sketchpad can be used to develop skills and aid in visualization in the context of the course content.

Developing proofs:

The process of developing valid proofs is a difficult one for many students. This process needs to be embedded in every BMP following the second. The text will have to be supplemented heavily at times to ensure that students are receiving adequate instruction and practice in this area.

Constructions:

Construction questions make up about 10 percent of the CST and should be incorporated into the course and emphasized on a regular basis.

Spiraling Curriculum:

A spiral approach to developing skills and concepts is suggested since students may not reach mastery in the time allotted. Continuous review will facilitate student retention of concepts.

Textbook Alignment:

This pacing guideline is designed to be independent of any text. Material is divided and taught in thematic groupings to facilitate student learning.

Need to Supplement the Textbook:

The text may need to be supplemented for various topics.

Greek letters:

Students should be familiar with Greek letters, such as α , β , and θ , particularly their use as variables for angle measures.

VOCABULARY

The CST and CAHSEE use a predictable set of vocabulary. Teachers should use appropriate terminology and force their students to do the same. Catchy mnemonics can be useful when introducing a concept, but students need to be fully conversant in mathematical language. The following is not an exhaustive list, but it provides a thorough foundation.

VOCABULARY FROM ALGEBRA I:	
-----------------------------------	--

absolute value	parallel, perpendicular
additive, multiplicative identity	perfect square, square root
additive, multiplicative inverse	point-slope form
algebraic proof	power, exponent, degree, base
counterexample, justification	rate of change, slope
cross multiplication, proportion	rational, irrational numbers
distributive, associative, commutative	reciprocal, negative, opposite
domain, range	root, solution, x-intercept
function, relation, function notation	slope-intercept form
hypothesis, conclusion	solution to linear system
inductive, deductive reasoning	standard form of a quadratic equation
intersection point	standard form of the equation of a line
inverse operations	system of equations, inequalities
linear combination	term, coefficient, constant
linear, quadratic	valid, invalid argument
model with a graph and/or an equation	vertex form of quadratic equation
monomial, binomial, polynomial	vertical change, horizontal change
ordered pair	x-intercept(s), y-intercept

VOCABULARY FOR GEOMETRY:

<p>acute, obtuse, right, straight angles adjacent angles, adjacent sides alternate interior, exterior angles angle bisector, perpendicular bisector acute, obtuse, right triangle angle of elevation, depression angle of rotation, center of rotation apothem of a polygon arc, major arc, minor arcs, arc length bisect center of circle, polygon central angle, sector, chord, diameter, radius, secant, tangent circumference, area collinear, coplanar, concurrent complementary, supplementary angles concave, convex concentric circles, tangent circles conditional, biconditional, definition congruent congruent, similar polygons conjecture, counterexample consecutive (same-side) interior angles construction, straight edge, compass converse, inverse, contrapositive coordinate, paragraph, indirect proof corresponding angles, sides, parts corresponding parts, CPCTC cross multiplication, extremes, means cylinder, cone, sphere diagonal, vertex, side of a polygon distance formula, hypotenuse, leg distance from a point to a line edge, face, vertex, base, lateral edge endpoints, midpoint, midpoint formula equilateral, equiangular, equidistant Greek letters as variables ($\alpha, \beta, \gamma, \theta$) hypothesis, conclusion, if-then form inductive, deductive reasoning inscribed, circumscribed circle</p>	<p>interior, exterior isosceles, scalene, right triangle line of symmetry linear pair, vertical angles midsegment of triangle, trapezoid net, cross section oblique prism, slant height parallel, perpendicular, skew, transversal parallelogram, rhombus, square, rectangle kite, trapezoid, isosceles trapezoid point of tangency point, line, plane polygon, regular polygon polyhedron, regular polyhedron postulate, axiom, theorem, corollary undefined term prism, pyramid Pythagorean Theorem Pythagorean triples ratio, proportion reflection, rotation, translation, dilation rotational symmetry scale factor, perimeter, area segment, ray, opposite rays similar triangles, AA sine, cosine, tangent solving a right triangle special right triangles SSA, Hinge Theorem SSS, SAS, ASA, AAS surface area, lateral area, volume tetrahedron transformation, image, preimage translation notation in the form $(x, y) \rightarrow (x + a, y + b)$ trigonometry, trig ratios two-column proof vertex angle of isosceles triangle vertex form of equation of a circle</p>
---	---

UNIT SUMMARIES

UNIT 1: Algebra Review (5 DAYS)

▶ *Benchmark Test 1*

UNIT 2: Review Basics of Geometry (7 DAYS)

UNIT 3: Transformations (3 DAYS)

UNIT 4: Reasoning and Proof (10 DAYS)

▶ *Benchmark Test 2*

UNIT 5: Perpendicular and Parallel Lines (6 DAYS)

UNIT 6: Triangles (15 DAYS)

UNIT 7: Right Triangles (8 DAYS)

▶ *Benchmark Test 3*

▶ Semester Final Exam

UNIT 8: Trigonometry (4 DAYS)

UNIT 9: Polygons (12 DAYS)

UNIT 10: Circles (12 DAYS)

▶ *Benchmark Test 4 (occurs in the middle of the Circles Unit)*

▶ California High School Exit Exam — Review and Administration (7 DAYS)

UNIT 11: Surface Area and Volume (11 DAYS)

▶ CALIFORNIA STANDARDS TEST — Review and Administration (est. 10 DAYS)

UNIT 12: PREPARING FOR ALGEBRA II (15-21 DAYS)

Inverse Trig Functions

Linear Equations

Rational Expressions

Quadratics

▶ Semester Final Exam

HOW TO READ THE TIMELINE

CA Standards from which a section's content are drawn (*Starred standards make up 70 percent of the CST; an A indicates a standard drawn from Algebra I, and a dash (-) indicates foundational material not specifically tested on the CST.*)

Section number within the pacing calendar (*This does not correspond to a section in a textbook.*)

UNIT 1: Algebra Review		Std	Days
1.1	<input type="checkbox"/> Solve proportions using cross-multiplication (§8.1)	A	1
1.2	<input type="checkbox"/> Write the equation of a parallel line through a specific point (§3.6)	17*	1
1.3	<input type="checkbox"/> Write the equation of a perpendicular line through a specific point (§3.7)	17*	1
1.4	<input type="checkbox"/> Multiply radicals with integer coefficients	A	1
	<input type="checkbox"/> Reduce a radical expression to lowest terms	A	
	<input type="checkbox"/> Clear radicals from the denominators of fractions	A	
1.5	<input type="checkbox"/> Factor a quadratic to find its roots	A	1
	<input type="checkbox"/> Use the quadratic formula to find the roots of a quadratic	A	
TOTAL			5

Checkbox

Discrete, measurable content or skill objective

Section in the *Geometry* Text that contains the specific content or skill (*Note: These notations do not suggest that the specific objective is covered to the depth required by the CST. Please supplement as often as possible, but those sections marked with a plus sign (+) require particular attention because the textbook is deficient in some way. If an objective is not paired with a textbook section, you will have to supplement with other materials.*)

Textbook sections in order to cover the re

Number of 50-minute instructional days the calendar recommends be spent on a section

ary materials and/or lessons in

UNIT ONE

5 DAYS

This unit is mostly review of middle school and Algebra I content. Students will use these skills throughout the course of geometry. The current text is lacking in topics related to radicals and quadratics. Therefore, it is necessary to supplement these topics with material from an Algebra 1 textbook.

UNIT 1: Algebra (A) Standards Review and (CA Geometry Standard: 17)

Std Days

1.1	<input type="checkbox"/> Solve proportions using cross-multiplication (§7.1)	A	1
1.2	<input type="checkbox"/> Write the equation of a parallel line through a specific point (§3.5, 3.6+)	17*	1
1.3	<input type="checkbox"/> Write the equation of a perpendicular line through a specific point (§3.5, 3.6+)	17*	1
1.4	<input type="checkbox"/> Multiply radicals with integer coefficients (+)	A	1
	<input type="checkbox"/> Reduce a radical expression to lowest terms (+)	A	
	<input type="checkbox"/> Clear radicals from the denominators of fractions (+)	A	
1.5	<input type="checkbox"/> Factor a quadratic to find its roots (S66+)	A	1
	<input type="checkbox"/> Use the quadratic formula to find the roots of a quadratic (+)	A	
TOTAL			5

Benchmark Testing: 2 days

**Geometry Benchmark 1 Assessment:
2 days during August 24-28, 2009**

The first benchmark test serves as a baseline exam.

UNITS TWO, THREE AND FOUR

29 DAYS

The lion’s share of this curricula period is devoted to construction and proof. Construction questions are almost always “what step comes next” or “what was the previous step” or “what is being constructed here” or “what was the first step of this construction.” The questions usually provide diagrams, but sometimes the answer choices are just written descriptions.

Begin the study of proofs using algebraic properties, and progress to “fill in the blank” with simple proofs about segments and angles. On the CST students will be expected to fill in blanks and find errors in completed proofs. Feel free to teach open-ended proofs from scratch but don’t spend time at this point helping all students achieve proficiency. That can wait until after the CST.

UNIT 2: Basic Geometry Review (CA Standards: 1, 8, 10, 13, 15, 16, 17)

		Std	Days
2.1	<input type="checkbox"/> Name points, lines, and planes and describe their essential properties (§1.1)	1*	1
2.2	<input type="checkbox"/> Calculate the length of the hypotenuse and legs of a right triangle using the Pythagorean Theorem (§1.6)	–	2
	<input type="checkbox"/> Determine the measure of a segment given its endpoints (a.k.a. the distance formula) (§1.6)	15	
	<input type="checkbox"/> Bisect a line segment using a compass and straight edge (§3.4)	16*	
	<input type="checkbox"/> Find the midpoint of a segment given its endpoints (§1.6)	17*	
	<input type="checkbox"/> Find an endpoint of a segment given its other endpoint and its midpoint (§1.6)	17*	
2.3	<input type="checkbox"/> Determine the measure of an angle using a protractor (§1.3)	–	1
	<input type="checkbox"/> Bisect an angle using a compass and straight edge (§1.3)	16*	
	<input type="checkbox"/> Copy an angle using a compass and straight edge (§1.3)	16*	
2.4	<input type="checkbox"/> Define and use complementary and supplementary angles (§1.4)	13	2
	<input type="checkbox"/> Find and use linear pairs in multistep problems (§1.4)	13	
	<input type="checkbox"/> Find and use vertical angles in multistep problems (§1.4)	13	
2.5	<input type="checkbox"/> Calculate from memory the perimeter of rectangles, triangles, and circles (§1.5)	8*	1
	<input type="checkbox"/> Calculate from memory the area of a rectangle and a square (§1.5)	8*	
	<input type="checkbox"/> Calculate from memory the area of a circle (§1.5)	8*	
	<input type="checkbox"/> Calculate from memory the area of a triangle (§1.5)	10*	
TOTAL			7

UNIT 3: Transformations (CA Standard: 22)

		Std	Days
3.1	<input type="checkbox"/> Identify transformations done by reflection (§1.7)	22*	3
	<input type="checkbox"/> Perform reflections about the x -axis and y -axis (§12.1)	22*	
	<input type="checkbox"/> Perform reflections about the lines $y = x$ and $y = -x$ (§12.1)	22*	
	<input type="checkbox"/> Perform reflections about horizontal and vertical lines (§12.1)	22*	
	<input type="checkbox"/> Identify transformations done by translation (§1.7)	22*	
	<input type="checkbox"/> Read, write, and perform translation instructions in form $(x,y) \rightarrow (x+a,y+b)$ (§12.2)	22*	
	<input type="checkbox"/> Identify transformations done by rotation (§1.7)	22*	
	<input type="checkbox"/> Perform CW and CCW rotations in increments of 90 degrees about the origin (§12.3)	22*	
TOTAL			3

UNIT 4: Reasoning and Proof (CA Standards: 1, 2, 3, 17)

		Std	Days
4.1	<input type="checkbox"/> Distinguish between inductive and deductive reasoning (§2.1+, 2.3+)	1*	2
	<input type="checkbox"/> Write a conjecture and a counterexample (§2.1, 2.2, 2.3)	3*	
	<input type="checkbox"/> Use a counterexample to disprove a conjecture (§2.1, 2.2)	3*	
	<input type="checkbox"/> Identify the hypothesis and conclusion of a logical argument (§2.2)	3*	
	<input type="checkbox"/> Determine whether an argument is <i>valid</i> and how this is different from <i>true</i> (§2.3+)	3*	
4.2	<input type="checkbox"/> Given a conditional statment, identify the inverse, converse & contrapositive, give counterexamples (§2.2, 2.4)	3*	2
4.3	<input type="checkbox"/> Fill in the algebraic properties that justify the statements of a two-column proof of multi-step algebra problems (§2.5)	2*	2
	<input type="checkbox"/> Fill in the statements for a two-column algebraic proof given the reasons (§2.5+)	2*	
	<input type="checkbox"/> Prove common formulae (coordinate proofs), including the distance formula and midpoint formula (§4.7+)	17*	
4.4	<input type="checkbox"/> Fill in missing statements and reasons in nearly complete 2-column segment addition and angle addition proofs (§2.5, 2.7+)	2*	4
	<input type="checkbox"/> Identify errors in completed 2-column segment addition and angle addition proofs (§2.6, 2.7+)	2*	
	<input type="checkbox"/> Distinguish between the transitive, symmetric, and reflexive properties (§2.5, 2.6, 2.7+)	2*	
TOTAL			10

Reserve for Review and Open-Ended Assessment: 2

Benchmark Testing: 2 days

Post-Benchmark Review, Re-teach and Enrich: 5

**Geometry Benchmark 2 Assessment:
2 days during October 5-9, 2009**

Although all content standards will be tested,
focus on the following standards during review:
1, 2, 3, 8, 10, 13, 15, 16, 17, 22

In this section, continue and expand proof work with parallel lines. A majority of the proof questions on the CST will involve parallel lines, and the underlying postulates and theorems are usually mastered quickly. Continue also to emphasize recognition of different constructions and to stress the importance of identifying “next steps.” Roughly half of all CST questions involve triangles in some way. The congruence theorems, which usually receive the most attention among this content, appear in only a handful CST questions each year. Similar triangles show up three times more often.

UNIT 5: Perpendicular and Parallel Lines (CA Standards: 7, 16)

		Std	Days
5.1	<input type="checkbox"/> Identify corresponding, alternate interior and exterior, and consecutive \angle s (§3.1)	7*	2
	<input type="checkbox"/> Find all eight angles in a parallel-transversal situation given any one (§3.2)	7*	
5.2	<input type="checkbox"/> Fill in missing statements or reasons in completed 2-column parallel proof (§3.3)(+)	7*	2
5.3	<input type="checkbox"/> Use properties of parallel lines to solve real-world word problems (3.1-3.4)(+)	7*	2
	<input type="checkbox"/> Construct a line through a given point and parallel another line (§3.3)	16*	
	<input type="checkbox"/> Construct a line through a given point and perpendicular to another line (§3.4)	16*	
TOTAL			6

UNIT 6: Triangles (CA Standards: 2, 4, 5, 6, 12)

		Std	Days
6.1	<input type="checkbox"/> Classify triangles by angle measurements and length of sides (§4.1)	12*	1
	<input type="checkbox"/> Solve problems involving the measure of a missing triangle angle (§4.2)	12*	
6.2	<input type="checkbox"/> Determine the longest and shortest sides in a triangle given its angles (§5.7)(+)	6	1
	<input type="checkbox"/> Determine the largest and smallest angles in a triangle given its sides (§5.7)(+)	6	
	<input type="checkbox"/> Explain how triangles change as angles and sides increase in size (§5.5)(+)	6	
6.3	<input type="checkbox"/> Read and write statements of congruence (§4.3)	–	1
6.4	<input type="checkbox"/> Use SSS and SAS to prove triangles congruent (§4.4)	5	2
	<input type="checkbox"/> Fill in missing parts in a proof of the SSS and SAS theorems (+)	4*	
6.5	<input type="checkbox"/> Use ASA, AAS, and HL to prove triangles congruent (§4.5)	5	2
	<input type="checkbox"/> Fill in missing parts in a proof of the ASA, AAS, and HL theorems (+)	4*	
6.6	<input type="checkbox"/> Show why SSA is not a congruence theorem (§4.4)(+)	4*	1
	<input type="checkbox"/> Use corresponding parts of congruent triangles to solve real-world problems (4.6)(+)	5	
6.7	<input type="checkbox"/> Fill in missing statements from a completed indirect proof (§5.5)	2*	3
	<input type="checkbox"/> Identify an error in an indirect proof (§5.5)(+)	2*	
6.8	<input type="checkbox"/> Use midsegments to determine the lengths and slopes of triangle sides (§5.4)	–	1
6.9	<input type="checkbox"/> Determine whether or not two figures are similar (§7.2)	5	3
	<input type="checkbox"/> Fill in missing parts of triangle similarity proofs (+)	4*	
	<input type="checkbox"/> Use similar triangles to solve problems, such as indirect distance measurement (§7.3, 7.5)(+)	5	
TOTAL			15

UNIT 7: Right Triangles (CA Standards: 14, 15, 20)

Std Days

7.1	<input type="checkbox"/> Use similar triangles to find the lengths of missing legs of right angles (§8.1)	–	1
7.2	<input type="checkbox"/> Find the missing side of right triangles (§5.7)	15	1
	<input type="checkbox"/> Use Pythagorean Theorem to prove that triangles are right, acute, or obtuse (§5.7)	15	
7.3	<input type="checkbox"/> Fill in missing pieces of a completed proof of a Pythagorean Theorem (§5.7)	14*	2
7.4	<input type="checkbox"/> Memorize the side ratios for 30-60-90 and 45-45-90 triangles (§5.8)	20*	3
	<input type="checkbox"/> Use special right triangles to solve real-world problems (§5.8)(+)	20*	
TOTAL			7

Reserve for Review and Open-Ended Assessment: 5

Benchmark Testing: 2 days

Post-Benchmark Review, Re-teach and Enrich: 5

Final Exams: 3

Geometry Benchmark 3 Assessment:

2 days during Nov. 30-Dec. 4, 2009

Although all content standards will be tested,
focus on the following standards during review:
1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 20, 22

Teacher-Created Final Exams

High School Fall Semester Final Exams:

Dec. 16-18, 2009

UNITS EIGHT, NINE AND TEN

30 DAYS

UNIT 7: Trigonometry (CA Standards: 18, 19)

Std Days

8.1	<input type="checkbox"/> Memorize the trigonometric ratios (§8.2)	–	2
	<input type="checkbox"/> Rewrite the trig ratios in various ways, such as <i>opposite</i> = $\sin x \cdot \text{hypotenuse}$ and $\sin^2 x + \cos^2 x = 1$ (§8.2)(+)	18*	
8.2	<input type="checkbox"/> Find all sides and angles of a right triangle given one side and an acute angle (§8.3)	19*	2
	<input type="checkbox"/> Solve right triangles to solve real-world problems, such as measuring height with a clinometer (§8.3,8.4)(+)	19*	
TOTAL			4

UNIT 9: Polygons (CA Standards: 7, 8, 10, 12, 13)

Std Days

9.1	<input type="checkbox"/> Classify polygons (§6.1)	12*	1
9.2	<input type="checkbox"/> Classify quadrilaterals (§6.2-6.5)	12*	3
	<input type="checkbox"/> Know the properties of parallelograms, rectangles, squares, rhombuses, kites, and trapezoids (§6.2-6.6)	12*	
9.3	<input type="checkbox"/> Calculate the sum of a polygon's internal angles and individual interior and exterior angles of regular polygons (§6.1)	12*	2
	<input type="checkbox"/> Solve problems relating the number of sides of a polygon and the measure of its interior and exterior angles (§6.1)	13	
9.4	<input type="checkbox"/> Use the properties of parallelograms to solve real-world problems (§6.2-6.5)(+)	7*	2
	<input type="checkbox"/> Fill in the missing statements and reasons for parallelogram proofs (§6.2-6.5)(+)	–	
9.5	<input type="checkbox"/> Find the area of triangles and quadrilaterals (§9.1)	10*	3
	<input type="checkbox"/> Use area addition and subtraction to find of area of figures (§9.1)	10*	
	<input type="checkbox"/> Find the area of regular polygons (§9.2)	8*	
TOTAL			11

UNIT 10a: Circles (CA Standard: 21)

Std Days

10.1	<input type="checkbox"/> Characterize the relationships between lines, segments, and circles (§11.1)	21*	1
10.2	<input type="checkbox"/> Calculate the measures of angles formed by tangents and secants, including in real-world problems (§11.2+, 11.4+, 11.5)(+)	21*	3
10.3	<input type="checkbox"/> Calculate the measures of segments of secant and tangents that intersect in, on, and outside a circle, including in real-world problems (§11.6)(+)	21*	3
TOTAL			7

Reserve for Review and Open-Ended Assessment: 1

Benchmark Testing: 2 days

Post-Benchmark Review, Re-teach and Enrich: 5

**Geometry Benchmark 4 Assessment:
2 days during February 8-12**

**CA Geometry Standards covered:
1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22**

UNITS TEN AND ELEVEN**23 DAYS****UNIT 10b: Circles (CA Standard: 8, 17)****Std Days**

10.4	<input type="checkbox"/> Read and write the equations of circles (§11.7)	17*	1
10.5	<input type="checkbox"/> Calculate circumference and arc length of circles (§11.3)	8*	2
10.6	<input type="checkbox"/> Calculate area and sector area of circles (§11.3)	8*	2
TOTAL			5

UNIT 11: Surface Area and Volume (CA Standard: 9, 11, 12)**Std Days**

11.1	<input type="checkbox"/> Classify solids (§10.1)	12*	1
11.2	<input type="checkbox"/> Calculate the surface area of prisms and cylinders (§10.4) <input type="checkbox"/> Memorize the surface area for prisms and cylinders (§10.4) <input type="checkbox"/> Calculate the surface area of pyramids and cones (§10.5) <input type="checkbox"/> Memorize the surface area for pyramids (§10.5)	9	4
11.3	<input type="checkbox"/> Calculate the volume of prisms and cylinders (§10.6) <input type="checkbox"/> Memorize the volume for prisms and cylinders (§10.6) <input type="checkbox"/> Calculate the volume of pyramids and cones (§10.7) <input type="checkbox"/> Memorize the volume for pyramids (§10.7)	9	3
11.4	<input type="checkbox"/> Calculate the surface area and volume of a sphere (§10.8)	9	1
11.5	<input type="checkbox"/> Solve real-world problems using the relationship between the changes in length, area, and volume (§10.4-10.8)+	11	2
TOTAL			11

Reserve for Review and Open-Ended Assessment: 2

Post-Benchmark Review and Re-teach: 5

CAHSEE REVIEW AND ADMINISTRATION**7 DAYS**

CST REVIEW AND ADMINISTRATION**estimated 10 DAYS****CAHSEE Test Dates: March 16-17, 2010**

Roughly 5 days allowed for CAHSEE review + 2 test days.

CST Window: April 7-May 11, 2009

Roughly two weeks allowed for review of all CST standards and CST testing.

UNIT TWELVE: PREPARING FOR ALGEBRA II**28 DAYS**

This unit includes review of material designed to prepare students for Algebra II or Algebra II w/ Trig. It also finishes introductory trigonometry by covering the concept of inverse trig ratios and solving right triangles given two sides. This entire unit will require supplementary material.

UNIT 12a: More Trigonometry & Linear Equations**Std Days**

12.1	<input type="checkbox"/> Solving right triangles using inverse trig functions	A2	1
12.2	<input type="checkbox"/> Slope intercept form of linear equations	A	2
	<input type="checkbox"/> Standard form of linear equations	A	
	<input type="checkbox"/> Converting between forms of linear equations	A	
12.3	<input type="checkbox"/> Solving systems of linear equations by graphing	A	1
12.4	<input type="checkbox"/> Solving systems of linear equations by substitution	A	1
	<input type="checkbox"/> Real world problems involving systems of linear equations	A	
12.5	<input type="checkbox"/> Solving systems of linear equations by combination	A	1
	<input type="checkbox"/> Real world problems involving systems of linear equations	A	
12.6	<input type="checkbox"/> Teacher-created assessment		1
TOTAL			7

UNIT 12b: Rational Expressions**Std Days**

12.7	<input type="checkbox"/> Rules of exponents	A	1
12.8	<input type="checkbox"/> Simplifying rational expressions	A	1
12.9	<input type="checkbox"/> Multiplying and dividing rational expressions	A	1
12.13	<input type="checkbox"/> Adding and subtracting rational expressions	A	2
12.14	<input type="checkbox"/> Teacher-created assessment		1
TOTAL			6

UNIT 12c: Quadratics**Std Days**

12.15	<input type="checkbox"/> Factoring and solving quadratics in the form $x^2 + bx + c = 0$	A	1
12.16	<input type="checkbox"/> Factoring and solving quadratics in the form $ax^2 + bx + c = 0$	A	1
12.17	<input type="checkbox"/> Reducing quadratics by dividing by the greatest common factor	A	1
	<input type="checkbox"/> Factoring the difference of squares	A	
12.18	<input type="checkbox"/> Using the quadratic formula	A	1
12.19	<input type="checkbox"/> Graphing quadratics	A	2
12.20	<input type="checkbox"/> Teacher-created assessment		1
TOTAL			7

Reserve for Review, Enrich and Open-Ended Assessment: 5

Teacher-Created Final Exams
High School Spring Semester Final Exams:
June 1-3, 2009