

Pre-Calculus AB: Topics and Assignments

Weeks 1 and 2

Monday	7/30	NO SCHOOL!	
Tuesday	7/31	NO SCHOOL!	
Wednesday	8/1	Start of School	
Thursday	8/2	Class Policy and Expectations Lesson 5 <i>Exponents and Radicals</i> <i>Complex Numbers</i> <i>Areas of Similar Geometric Figures</i> <i>Diagonals of Rectangular Solids</i>	
Friday	8/3	Lesson 6 <i>Fractional Equations</i> <i>Radical Equations</i> <i>Systems of Three Linear Equations</i>	★ HW DUE: PS 5 Student Info Sheet
Monday	8/6	Lesson 7 <i>Inductive and Deductive Reasoning</i> <i>Logic</i> <i>Contrapositive, converse, inverse</i>	★ HW DUE: PS 6
Tuesday	8/7	Lesson 8 <i>Statements of Similarity</i> <i>Proportional Segments</i> <i>Angle Bisectors, Side Ratios</i>	★ HW DUE: PS 7
Wednesday	8/8	Quiz #1: Lessons 1-6	
Thursday	8/9	Lesson 9 <i>Congruent Figures</i> <i>Proof Outlines</i>	★ HW DUE: PS 8
Friday	8/10	Lesson 10 <i>Equation of a Line</i> <i>Rational Denominators</i> <i>Completing the Square</i>	★ HW DUE: PS 9

Pre-Calculus AB: Topics and Assignments

Weeks 3 and 4

Monday	8/13	Lesson 11 <i>Circles</i> <i>Properties of Circles</i>	★ HW DUE: PS 10
Tuesday	8/14	Lesson 12 <i>Angles, diagonals in Polygons</i>	★ HW DUE: WS 1
Wednesday	8/15	TEST #1: Lessons 1-8	
Thursday	8/16	Lesson 13 <i>Intersecting Secants, tangents</i> <i>Products of Chord Segments</i> <i>Product secant, tangent segments</i>	★ HW DUE: PS 12
Friday	8/17	Lesson 14 <i>Sine, Cosine, Tangent</i> <i>Angles of Elevation, depression</i> <i>Rectangular Polar Coords</i> <i>Coordinate Conversion</i>	★ HW DUE: PS 13
Monday	8/20	NO SCHOOL!	
Tuesday	8/21	Lesson 15 <i>Proofs</i>	★ HW DUE: WS 2
Wednesday	8/22	Quiz #2: Lessons 8-14	
Thursday	8/23	Lesson 16 <i>Complex Fractions</i> <i>Abstract Equations</i> <i>Division of Polynomials</i>	★ HW DUE: PS 15
Friday	8/24	Lesson 17 <i>Proofs of Pythagorean Thm</i> <i>Proofs of Similarity</i>	★ HW DUE: PS 16

Pre-Calculus AB: Topics and Assignments

Weeks 5 and 6

Monday	8/27	Lesson 18 <i>Advanced Word Problems</i>	★ HW DUE: PS 17
Tuesday	8/28	Lesson 19 <i>Nonlinear Systems</i> <i>Factoring Exponentials</i> <i>Sum, Difference of Cubes</i>	★ HW DUE: WS 3
Wednesday	8/29	TEST #2: Lessons 1-16	
Thursday	8/30	Lesson 20 <i>Two Special Triangles</i>	★ HW DUE: PS 19
Friday	8/31	Lesson 21 <i>Evaluating Functions</i> <i>Domain and Range</i> <i>Tests for Functions</i>	★ HW DUE: PS 20
Monday	9/3	NO SCHOOL!	
Tuesday	9/4	Lesson 21 <i>Basic Graphs</i> <i>Transformations</i>	★ HW DUE: WS 4
Wednesday	9/5	Quiz #3: Lessons 16-21	
Thursday	9/6	Lesson 22 <i>Absolute Value Function</i> <i>Reciprocal Functions</i>	★ HW DUE: WS 5
Friday	9/7	Lesson 23 <i>Exponential Functions</i> <i>sketching Exponentials</i>	★ HW DUE: PS 22

Pre-Calculus AB: Topics and Assignments

Weeks 7 and 8

Monday	9/10	Lesson 24 <i>Sum of Trig Functions</i> <i>Combining Functions</i>	★ HW DUE: PS 23
Tuesday	9/11	Lesson 25 <i>Rate Problems</i>	★ HW DUE: PS 24
Wednesday	9/12	TEST #3: Lessons 1-22	
Thursday	9/13	Lesson 26 <i>Log and Exponential Form</i> <i>Log Equations</i>	★ HW DUE: WS 6
Friday	9/14	Lesson 27 <i>Related Angles</i> <i>Sign of Trig Functions</i>	★ HW DUE: PS 26
Monday	9/17	Lesson 28 <i>Factorial Notation</i> <i>Abstract Rate Problems</i>	★ HW DUE: PS 27
Tuesday	9/18	Lesson 29 <i>The Unit Circle</i> <i>Quadrantal Angles</i>	★ HW DUE: PS 28
Wednesday	9/19	Quiz #4: Lessons 21-28	
Thursday	9/20	Lesson 30 <i>Addition of Vectors</i> <i>Overlapping Triangles</i>	★ HW DUE: WS 7
Friday	9/21	Lesson 31 <i>Symmetry</i> <i>Reflections</i> <i>Translations</i>	★ HW DUE: PS 30

Pre-Calculus AB: Topics and Assignments

Weeks 9 and 10

Monday	9/24	Lesson 32 <i>Inverse Functions</i>	* HW DUE: PS 31
Tuesday	9/25	Lesson 32 <i>Inverse Trig Functions</i>	* HW DUE: WS 8
Wednesday	9/26	TEST #4: Lessons 1-30	
Thursday	9/27	Lesson 33 <i>Quadrilaterals</i> <i>Parallelograms</i> <i>Trapezoids</i>	* HW DUE: WS 9
Friday	9/28	Lesson 34 <i>Summation Notation</i> <i>Linear Regression</i> <i>Decomposing Functions</i>	* HW DUE: PS 33
Monday	10/1	Lesson 35 <i>Change in Coordinates</i> <i>Distance Formula</i>	* HW DUE: WS 10
Tuesday	10/2	Lesson 36 & 37 <i>Line as a Locus</i> <i>Midpoint Formula</i>	* HW DUE: PS 35
Wednesday	10/3	Quiz #5: Lessons 29-35	
Thursday	10/4	Lesson 38 <i>Fund. Counting Principle</i> <i>Permutations</i> <i>Designated Roots</i> <i>Overall Average Rate</i>	* HW DUE: PS 37
Friday	10/5	Lesson 39 <i>Forms of a Line</i>	* HW DUE: PS 38

Pre-Calculus AB: Topics and Assignments

Week 11

Monday	10/8	NO SCHOOL!	
Tuesday	10/9	NO SCHOOL!	
Wednesday	10/10	NO SCHOOL!	
Thursday	10/11	NO SCHOOL!	
Friday	10/12	NO SCHOOL!	
Monday	10/15	Lesson 40 <i>Argument in Math</i> <i>Law of Logs</i> <i>Properties of Inverses</i>	★ HW DUE: WS 11
Tuesday	10/16	Lesson 41 <i>Reciprocal Trig Functions</i> <i>Permutation Notation</i>	★ HW DUE: WS 12
Wednesday	10/17	TEST #5: Lessons 1-38	
Thursday	10/18	Lesson 42 <i>Conic Sections</i> <i>Circles</i> <i>Exponential Functions</i>	★ HW DUE: PS 41
Friday	10/19	Lesson 43 <i>Periodic Functions</i> <i>Graphs of Sine and Cosine</i>	★ HW DUE: WS 13

Pre-Calculus AB: Topics and Assignments

Weeks 12 and 13

Monday	10/22	Lesson 44 <i>Abstract Rate Problems</i>	★ HW DUE: WS 14
Tuesday	10/23	Quiz #6: Lessons 38-44	
Wednesday	10/24	Lesson 45 <i>Conditional Permutations</i> <i>Two-variable Analysis</i>	★ HW DUE: PS 44
Thursday	10/25	Lesson 46 <i>Complex Roots</i> <i>Factoring over \mathbb{C}</i>	★ HW DUE: PS 45
Friday	10/26	Lesson 47 <i>Vertical Sinusoid Shifts</i> <i>Arctangent</i>	★ HW DUE: WS 15
Monday	10/29	Lesson 48 <i>Powers of Trig Functions</i> <i>Perpendicular Bisectors</i>	★ HW DUE: WS 16
Tuesday	10/30	Lesson 49 & 50 <i>Log Functions</i> <i>Trig Equations</i>	★ HW DUE: PS 48
Wednesday	10/31	TEST #6: Lessons 1-46	
Thursday	11/1	Lesson 51 & 52 <i>Natural and Common Logs</i> <i>Arguments in Trig Equations</i>	★ HW DUE: WS 17
Friday	11/2	Lesson 53 <i>Unit Multipliers</i> <i>Angular Velocity</i>	★ HW DUE: PS 52

Pre-Calculus AB: Topics and Assignments

Weeks 14 and 15

Monday	11/5	Lesson 54 <i>Parabolas</i>	* HW DUE: PS 53
Tuesday	11/6	Lesson 55 <i>Circular Permutations</i> <i>Distinguishable Permutations</i>	* HW DUE: WS 18
Wednesday	11/7	Quiz #7: Lessons 46-53	
Thursday	11/8	Lesson 56 <i>Triangular Areas</i> <i>System of Inequalities</i>	* HW DUE: PS 55
Friday	11/9	Lesson 57 <i>Phase Shifts</i> <i>Period of a Sinusoid</i>	* HW DUE: PS 56
Monday	11/12	NO SCHOOL!	
Tuesday	11/13	Lesson 58 <i>Distance from point to line</i> <i>More Parabolas</i>	* HW DUE: WS 19
Wednesday	11/14	TEST #7: Lessons 1-55	
Thursday	11/15	Lesson 59 <i>Advanced Log Problems</i> <i>Color of the White House</i>	* HW DUE: PS 58
Friday	11/16	Lesson 60 <i>Factorable Trig Equations</i> <i>Loss of Solutions</i>	* HW DUE: WS 20

Pre-Calculus AB: Topics and Assignments

Weeks 16 and 17

Monday	11/19	Lesson 61 <i>Single-variable Analysis</i> <i>Normal Distribution</i> <i>Box and Whisker Plots</i>	★ HW DUE: WS 21
Tuesday	11/20	TBA	★ HW DUE: PS 61
Wednesday	11/21	NO SCHOOL!	
Thursday	11/22	NO SCHOOL!	
Friday	11/23	NO SCHOOL!	
Monday	11/26	NO SCHOOL!	
Tuesday	11/27	Lesson 62 & 63 <i>Abstract Coefficients</i> <i>Linear Variation</i> <i>Circles</i>	
Wednesday	11/28	Quiz #8: Lessons 55-61	
Thursday	11/29	Lesson 64 <i>Complex Plane</i> <i>Polar Form</i> <i>Sums and Products</i>	★ HW DUE: WS 22
Friday	11/30	Lesson 65 <i>Radicals in Trig Equations</i> <i>Graphs of Log Functions</i>	★ HW DUE: PS 64

Pre-Calculus AB: Topics and Assignments

Weeks 18 and 19

Monday	12/3	Lesson 66 <i>Standard Form of a Sinusoid</i> <i>Phase Shifts, Period Changes</i>	★ HW DUE: PS 65
Tuesday	12/4	Lesson 67 & 68 <i>Antilogarithms</i> <i>Locus Definition-Parabola</i> <i>Focus and Directrix</i>	★ HW DUE: WS 23
Wednesday	12/5	TEST #8: Lessons 1-64	
Thursday	12/6	Lesson 68 <i>Standard Form of a Parabola</i> <i>Applications</i>	★ HW DUE: PS 67
Friday	12/7	Lesson 69 <i>Matrices</i> <i>Determinants</i>	★ HW DUE: PS 68
Monday	12/10	Calculator Day <i>Graphing, Changing Window</i> <i>Finding zeros, max, min</i> <i>Intersection Points</i>	★ HW DUE: WS 24
Tuesday	12/11	Lesson 71 <i>The Ellipse</i>	★ HW DUE: WS 25
Wednesday	12/12	Lesson 72 <i>One Side, Two Parts</i> <i>Law of Sines</i>	★ HW DUE: PS 71
Thursday	12/13	Lesson 73 & 74 <i>Regular Polygons</i> <i>Cramer's Rule</i>	★ HW DUE: WS 26
Friday	12/14	Lesson 75 <i>Combinations</i>	★ HW DUE: PS 74

Pre-Calculus AB: Topics and Assignments

Weeks 20 and 21

Monday	12/17	Lesson 76 <i>Even and Odd Functions</i> <i>Trig Identities</i>	★ HW DUE: PS 75
Tuesday	12/18	Lesson 77 <i>Binomial Expansion</i>	★ HW DUE: WS 28
Wednesday	12/19	Quiz # 9: Lessons 65 - 74	HW DUE: WS 29
Thursday	12/20	Christmas Party! + Gift Exchange	Bring a gift under \$10
Friday	12/21	NO SCHOOL!	
Monday	1/7	Review - Functions	
Tuesday	1/8	Review - Trig Functions	
Wednesday	1/9	Review - Word Problems	
Thursday	1/10	Review - Geometry	
Friday	1/11	Review - Algebra	

Pre-Calculus AB: Topics and Assignments

Weeks 22 and 23

Monday	1/15	Exam Study	
Tuesday	1/15	Pre-Comps or Midterms	
Wednesday	1/16	Pre-Comps or Midterms	
Thursday	1/17	Pre-Comps or Midterms	
Friday	1/18	Review Lessons 72-77 <i>Law of Sines</i> <i>Cramer's Rule</i> <i>Combinations</i> <i>Even and Odd Functions</i> <i>Trig Identities</i> <i>Binomial Expansion</i>	
Monday	1/21	NO SCHOOL!	
Tuesday	1/22	Lesson 78 <i>The Hyperbola</i>	★ HW DUE: PS 77
Wednesday	1/23	TEST #9: Lessons 1- 75	
Thursday	1/24	Lesson 79 <i>De Moivre's Theorem</i> <i>Roots of Complex Numbers</i>	★ HW DUE: PS 78
Friday	1/25	Lesson 80 <i>Trig Identities</i>	★ HW DUE: WS 30

Pre-Calculus AB: Topics and Assignments

Weeks 24 and 25

Monday	1/28	Lesson 81 <i>Law of Cosine</i>	★ HW DUE: PS 80
Tuesday	1/29	Lesson 82 <i>Taking the Log of Exponential Equations</i>	★ HW DUE: WS 31
Wednesday	1/30	Quiz # 10 : Lessons 75-81	
Thursday	1/31	Lesson 83 <i>Simple Probability Independent Events</i>	★ HW DUE: WS 32
Friday	2/1	Lesson 84 <i>Factorable Expressions Sketching Sinusoids</i>	★ HW DUE: PS 83
Monday	2/4	Lesson 85 <i>Advanced Trig Equations</i>	★ HW DUE: WS 33
Tuesday	2/5	Lesson 86 <i>Arithmetic Progressions Arithmetic Means</i>	★ HW DUE: PS 85
Wednesday	2/6	TEST #10: Lessons 1-83	
Thursday	2/7	Lesson 87 <i>Sum/Difference Identities Tangent Identities</i>	★ HW DUE: WS 34
Friday	2/8	Lesson 88 <i>Exponential Functions Exponential Growth/Decay</i>	★ HW DUE: PS 87

Pre-Calculus AB: Topics and Assignments

Week 26

Monday	2/11	Lesson 89 & 90 <i>The Ellipse (2)</i> <i>Double Angle Identities</i>	★ HW DUE: WS 35
Tuesday	2/12	Lesson 91 & 92 <i>Geometric Progression</i> <i>Probability of Either</i>	★ HW DUE: PS 90
Wednesday	2/13	Quiz #11: Lessons: 83-89	
Thursday	2/14	Lesson 93 <i>Advanced Trig Identities</i> <i>Triangle Inequalities</i>	★ HW DUE: WS 36
Friday	2/15	Lesson 94 & 95 <i>Graphs of Secant, Cosecant</i> <i>Graphs of Tangent, Cotangent</i> <i>Advanced Complex Roots</i>	★ HW DUE: PS 93
Monday	2/18	Lesson 96 & 97 <i>Double Angle Identities</i> <i>Triangle Area Formula</i> <i>The Ambiguous Case</i>	★ HW DUE: WS 37
Tuesday	2/19	Lesson 98 <i>Change of Base Formula</i> <i>Contrived Log Problems</i>	★ HW DUE: PS 97
Wednesday	2/20	Lesson 99 <i>Sequence Notation</i> <i>Advanced Sequence Problems</i> <i>Arithmetic/Geometric Means</i>	★ HW DUE: PS 98
Thursday	2/21	NO SCHOOL!	
Friday	2/22	NO SCHOOL!	

Pre-Calculus AB: Topics and Assignments

Weeks 27 and 28

Monday	2/25	Series (104) <i>Arithmetic Series</i> <i>Geometric Series</i> <i>Nth Partial Sums</i>	★ HW DUE: WS 38
Tuesday	2/26	Series (117) <i>Infinite Series</i> <i>Convergent Geometric Series</i>	★ HW DUE: PS 99
Wednesday	2/27	TEST # 11: Lessons 1-97	
Thursday	2/28	Matrices (101, 105) <i>3 x 3 Determinants</i> <i>Cramer's Rule</i> <i>Independent Systems</i>	★ HW DUE: WS 39
Friday	3/1	Matrices (108) <i>Matrix Multiplication</i>	★ HW DUE: WS 40
Monday	3/4	Rationals and Primes (109, 117) <i>Rational vs. Real Numbers</i> <i>Proof Number is Rational</i> <i>Prime vs. Relatively Prime</i>	★ HW DUE: WS 41
Tuesday	3/5	Binomial Theorem (102, 112) <i>Binomial Expansion</i> <i>Combinations-Pascal's Triangle</i> <i>Binomial Theorem</i>	★ HW DUE: WS 42
Wednesday	3/6	Quiz # 12: Series, Matrices	
Thursday	3/7	Conic Sections (106, 123) <i>Types of Conic Sections</i> <i>Translated Conic Sections</i> <i>General Conic Equation</i>	★ HW DUE: WS 43
Friday	3/8	Conic Sections (106, 123) <i>Work on WS 44</i>	

Pre-Calculus AB: Topics and Assignments

Week 29

Monday	3/11	Inverse Trig Functions (110) <i>Graphs, Domain, Range</i> <i>Inverse Properties</i>	* HW DUE: WS 44
Tuesday	3/12	Inverse Trig Functions (110) <i>Applications</i>	* HW DUE: WS 45
Wednesday	3/13	Review for Test 12	* HW DUE: WS 46
Thursday	3/14	TEST # 12: Upto Conics	
Friday	3/15	flex day	
Monday	3/18	NO SCHOOL!	
Tuesday	3/19	NO SCHOOL!	
Wednesday	3/20	NO SCHOOL!	
Thursday	3/21	NO SCHOOL!	
Friday	3/22	NO SCHOOL!	

Pre-Calculus AB: Topics and Assignments

Weeks 30 and 31

Monday	3/25	Exponential Functions (88) <i>Solving Equations</i> <i>Word Problems</i>	
Tuesday	3/26	Exponential Functions (88) <i>Exponential Models</i> <i>Interpretations</i>	★ HW DUE: WS 47
Wednesday	3/27	Functions (24) <i>Continuous Functions</i> <i>Increasing/Decreasing</i> <i>Local Maximas/Minimas</i> <i>Function Operations</i>	★ HW DUE: WS 48
Thursday	3/28	Functions (21, 31, 32) <i>Transformations</i> <i>One-to-one Functions</i> <i>Inverse Functions</i>	★ HW DUE: WS 49
Friday	3/29	Functions (18, 44) <i>A Function of</i> <i>Word Problems</i>	★ HW DUE: WS 50
Monday	4/1	Piecewise Functions (121) <i>Evaluating</i> <i>Graphing</i> <i>Writing Equations</i>	★ HW DUE: WS 51
Tuesday	4/2	AZmerit	
Wednesday	4/3	AZmerit	
Thursday	4/4	AZmerit	
Friday	4/5	AIMS/Flex day	

Pre-Calculus AB: Topics and Assignments

Weeks 32 and 33

Monday	4/8	Piecewise Functions (121) <i>Step Functions</i> <i>Applications</i>	★ HW DUE: WS 52
Tuesday	4/9	Absolute Value Functions (22) <i>Graphs of $f(x)$</i> <i>Graphs of $f(x)$</i>	★ HW DUE: WS 53
Wednesday	4/10	Quiz# 13: Inverse Trig to Functions	
Thursday	4/11	Optimization Problems <i>Set Up</i> <i>Finding Max/Min on Calc</i>	★ HW DUE: WS 54
Friday	4/12	Optimization Problems <i>Work on WS 55</i>	
Monday	4/15	NO SCHOOL!	
Tuesday	4/16	NO SCHOOL!	
Wednesday	4/17	Limits of Functions <i>End Behavior</i> <i>Holes</i>	★ HW DUE: WS 55
Thursday	4/18	Polynomials (113, 114, 115) <i>End Behavior</i> <i>Local vs. Absolute Extrema</i> <i>Turning Points/Zeros</i> <i>Graphs-Distinct Linear Factors</i>	★ HW DUE: WS 55.5
Friday	4/19	Quiz # 14: Functions to Optimization	

Pre-Calculus AB: Topics and Assignments

Weeks 34 and 35

Thursday	4/22	Polynomials (114) <i>Irreducible Factors</i> <i>Multiplicity of Roots</i> <i>Graphs</i>	★ HW DUE: WS 56
Tuesday	4/23	Polynomials (117, 118) <i>Factoring Polynomials</i> <i>Remainder Theorem</i> <i>Rational Roots Theorem</i>	★ HW DUE: WS 57
Wednesday	4/24	Rational Functions (122) <i>Holes and Zeros</i> <i>Vertical Asymptotes</i> <i>Horizontal/Slant Asymptotes</i>	★ HW DUE: WS 58
Thursday	4/25	Rational Functions (122) <i>End behavior</i> <i>Sign Chart</i> <i>Graphs</i>	★ HW DUE: WS 59
Friday	4/26	Rational Functions (122, 125) <i>Graphs</i>	★ HW DUE: WS 60
Monday	4/29	Test Review	★ HW DUE: WS 61
Tuesday	4/30	TEST # 13: Cumulative	
Wednesday	5/1	Topic: Comp Review <i>Complex numbers (14, 79)</i> <i>Functions (21, 34, 38)</i>	
Thursday	5/2	Topic: Comp Review <i>Trig Functions (32, 41, 48, 66)</i> <i>Permutations (38)</i> <i>Combinations (75)</i> <i>Binomial Exp. (77)</i> <i>Sequences (99)</i>	★ HW: Comp WS 1 Comp WS 2
Friday	5/3	Topic: Comp Review <i>Trig Equations (52, 60, 84)</i> <i>System of Inequalities (56)</i> <i>Completing the Square (63)</i>	★ HW: Comp WS 3 Comp WS 4

Pre-Calculus AB: Topics and Assignments

Weeks 36 and 37

Monday	5/6	Topic: Comp Review <i>Logarithms (59, 98)</i> <i>Cramer's Rule (62, 74)</i> <i>Determinants (69)</i>	★ HW: Comp WS 5 Comp WS 6
Tuesday	5/7	Topic: Comp Review <i>Law of Sines (72)</i> <i>Identities (87, 90, 96)</i> <i>Exponential Functions (82, 88)</i>	★ HW: Comp WS 7 Comp WS 8
Wednesday	5/8	Topic: Comp Review <i>Polynomials</i> <i>Rational Functions</i>	★ HW: Comp WS 9 & 10
Thursday	5/9	Topic: Comp Review	★ HW: Comp WS 11 & 12
Friday	5/10	Topic: Comp Review	★ HW: Extras
Monday	5/13	Topic: Comp Reivew	★ HW: Extras
Tuesday	5/14	Topic: Comp Review	★ HW: Extras
Wednesday	5/15	Comp or Study for Final Exams	
Thursday	5/16	Comp or Final Exams	
Friday	5/17	Comp or Final Exams	

Pre-Calculus AB: Topics and Assignments

Week 38 and 39

Monday	5/20	Project week	
Tuesday	5/21	Project week	
Wednesday	5/22	Project week	
Thursday	5/23	Project week	
Friday	5/24	Project week	