Precalculus Pacing

Chapter	Assignment	# of days
Chapter P – Prerequisites	p.10 Quick Review	
Section P.1 – Real Numbers	p.11 #1-9odd, 10, 11-23odd, 29-43odd, 47-52, 57-60, 63	1
Section p.2 – Cartesian Coordinate System	p.20 #9-10, 19, 21, 26-28, 35-36, 39, 42-48even, 49, 53, 56-58, 60, 64abc	1
Section p.3 – Linear Equations and Inequalities	p.29 #2, 4, 15-27odd, 32-42even, 52, 54, 68-73	1
Section p.4 – Lines in a Plane	p.40 #1-2, 3-17odd, 20-26even, 27, 29, 36 p.41 #42, 44-45, 47, 53, 61-66 Quiz P.1-P.4	3
Section p.5 – Solving Equations Graphically, Numerically, and Algebraically	p.50 #2, 4, 12, 13, 17, 20, 24, 26 p.50 #40, 44-45, 48-56even, 57, 60-61, 65-67	2
Section p.6 – Complex Numbers	p.57 #4, 6-7, 13-14, 16-20even, 23, 26, 30, 32-33, 37, 41, 43	1
Section p.7 – Solving Inequalities Algebraically and Graphically	p.64 #1, 5, 7, 10-16even, 20, 22, 27, p.64 #33, 34, 37 Quiz P.5-P.7	3
Review	pp.66 #3, 18, 27-28, 31, 46, 54-55, 63-64, 80-81 Chapter P Test	2
Chapter 1 – Functions and Graphs		
Section 1.1 – Modeling and Equation Solving	p.81 #2-10even, 11-18, 25-28, 29-43odd, 47, 50	2
Section 1.2 – Functions and Their Properties	p.102 #1-8, 9-15odd, 16-17, 19, 21-23 p.102 #26, 29, 32, 34-37, 40-41, 43 p.103 #48-62even, 63-67, 73-76, 80	3
Section 1.3 – Twelve Basic Functions	p.113 #1-28 p.114 #30-42even, 45-46, 51, 53, 68 Quiz 1.1-1.3	3
Section 1.4 – Building Functions from Functions	p.124 #1-21odd, 23-30 p.125 #31-32, 37-38, 41, 52	2
Section 1.5 – Parametric Relations and Inverses	p.135 #1-5, 7 p.135 #9-12, 13-23odd, 26-27, 31, 34,49	2
Section 1.6 – Graphical Transformations	p.147 #1-12	2

	p.147 #13-19odd, 21-27odd, 39-49odd, 67-68 (p.148 #35-38)	
Section 1.7 – Modeling with Functions	p.160 #1-10, 15-16, 21-23, 31-33, 39 (p.161 #35, 37, 51, 52f) Applications WS 1.4-1.7	2
Review	p.165 #1-10, 19, 21, 37, 44, 49, 53, 57, 62 Chapter 1 Test	2
Chapter 2 – Polynomial, Power, and Rational Functions		
Section 2.1 – Linear and Quadratic Functions and Modeling	p.182 #1-11odd, 45-49, 51-52, 69 p.182 #13-17odd, 19-22, 23-43odd, 53 p.184 #54-55, 57-58, 61-62, 65-67, 70	3
Section 2.2 – Power Functions with Modeling	p.196 #1-19, 24-25 p.197 #28-42even, 49, 51, 54-55	2
Section 2.3 – Polynomial Functions of Higher Degree with Modeling	p.209 #2-6even, 7-12, 15, 18-24even, 25-28 p.210 #29-32, 34-46even, 49, 52, 54-55, 57, 59, 63, 66	2
Section 2.4 – Real Zeros of Polynomial Functions Review Probs. P.269 #5-6, 9-10, 17-18, 21(find k&a), 25, 38, 50, 88	Dividing Polynomials Worksheet p.223 #1, 4, 7, 10, 12, 13, 16, 19, 21, 25-27, 29 p.224 #34, 36, 50, 52, 57 Quiz 2.1-2.4	3
Skip to Chapter 4	Preparation for December ACT.	
Chapter 4 – Trigonometric Functions		
Section 4.1 – Angles and Their Measures	p.356 #3-33(x3) p.356 #35-43odd, 44, 53, 63-69odd	2
Section 4.2 - Trigonometric Functions of Acute Angles	p.366 #3-18(x3) and find θ, 19-26, 29-39odd, 42-48even p.367 #49-57odd, 61-62, 75-76	2
Section 4.3 – Trigonometry Extended: The Circular Functions	p.381 #3-19odd, 21-48(x3), 61-62 Unit Circle	1
Section 4.4 – Graphs of Sine and Cosine: Sinusoids	p.392 #3-66(x3) p.393 #72-73, 76, 79, 87ab, 88ab Quiz 4.1-4.4	3

Section 5.1 - Fundamental Identities	Practice 5.1 Worksheet	1
Section 4.5 - Graphs of Tangent, Cotangent, Secant, and Cosecant	p.401 #1-4, 5-11odd, 14-28even, p.402 #30-34even, 42, 45-47, 49, 51-55	2
Section 4.6 – Graphs of Composite Trigonometric Functions	p.411 #1-21odd p.412 #23-26, 29-37odd	2
Section 4.7 – Inverse Trigonometric Functions	p.421 #1-31odd, 41-46, 47, 49, 59-62	1
Section 4.8 – Solving Problems with Trigonometry	p.431 #1, 3, 5, 8, 13, 15-16, 21-23, 25, 29, 31 Quiz 4.5-4.8	2
EMPT	Week before Christmas Break	1
Chapter 2- Polynomial, Power, and Rational Functions (Cont.)		
Section 2.5 – Complex Zeros and the Fundamental Theorem of Algebra	p.234 #1-7odd, 14, 16-20, 21-29odd p.234 #38-42even, 49, 56-57	2
Section 2.6 – Graphs of Rational Functions	p.245 #1-9odd, 11-18, 31-36 p.245 #19-29odd, 38, 40, 58, 60, 65-68	2
Section 2.7 – Solving Equations in One Variable	p.253 #2-10even, 15-21odd, 24-32even, 35	1
Section 2.8 – Solving Inequalities in One Variable	p.264 #1-23odd p.265 #26-56even, 59, 61 Quiz 2.5-2.8	3
Review Semester Exams		5
Chapter 3 – Exponential, Logistic, and Logarithmic Functions		
Section 3.1 – Exponential and Logistic Functions	p.286 #1-14, 15-21odd, 25-30, 32, 38 p.287 #44-45, 49-50, 56-58, 61-64	2
Section 3.2 - Exponential and Logistic Modeling	p.296 #1-15odd, 19-27odd, 32-33, 39-40, 44-46	1
Section 3.3 – Logarithmic Functions and Their Graphs	p.308 #2-36even, 37-40, 41-51odd, 53-54, 62, 65-69	2
Section 3.4 – Properties of Logarithmic Functions	p.317 #1-21odd, 25, 29, 34, 42-46, 50, 52, 59-62	2

	Re-Expressing Data Activity p.319 #65 Quiz 3.1-3.4 Application Worksheet	
Section 3.5 – Equation Solving and Modeling	p.331 #1-17odd, 26-38even p.331 #40, 42, 46, 48, 50 p.332 #51, 55-58, 61-65, 73-77odd	3
Section 3.6 – Mathematics of Finance	p.341 #3-12(x3), 21-30(x3), 46 p.341 #15, 18, 48-54even, 55	2
Review	p.344 #1-5odd, 17-18, 21, 27-29, 45-50, 53-54, 64, 67-68, 71, 83, 95 Chapter 3 Test	2
Chapter 5 – Analytic Geometry		
Section 5.1 - Fundamental Identities	p.451 #1-5odd, 9-21odd p.452 #24, 26-27, 29, 31-32, 34, 38, 44, 48 p.452 #51-59odd, 77-80	3
Section 5.2 – Proving Trigonometric Identities	p.460 #1-4, 12, 14, 22, 30, 34, 42, 58-60, 63	2
Section 5.3 – Sum and Difference Identities	p.468 #1-9odd, 12-20even, 23, 25, 37, 48	1
Section 5.4 – Multiple-Angle Identities	p.475 #3, 6, 8, 15-24(x3), 32, 33, 36, 50 Quiz 5.1-5.4	2
Section 5.5 – The Law of Sines	p.484 #1-11odd, 39-40, 45 p.484 #13-15, 19-23odd, 25-28	2
Section 5.6 – The Law of Cosines	p.494 #1-9odd, 29-30, 36, 38, 41, 43 p.494 #17-25odd, 31 Quiz 5.5-5.6	3
Chapter 6 – Applications of Trigonometry		
Section 6.1 – Vectors in the Plane	p. 511 #3-27 (x3) p. 512 #30-39(x3), 41-45 odd, 48, 51	2
Section 6.2 – Dot Product of Vectors	p. 519 #3-24 (x3), 33-38	1
Section 6.3 – Parametric Equations and Motion	p.530 #1-5, 7-10, 11-31 odd, 65 p.530 #37, 40, 44, 50, 51 Quiz 6.1-6.3	3

Section 6.4 – Polar Coordinates	p.539 #1-13odd, 23-26 p.539 #15-21odd, 27, 29, 31-40, 43-47 odd	2
Section 6.5 – Graphs of Polar Equations	p. 548 #1-7 odd, 13-43 odd	1
Review	p.562 #21a, 53, 55, 58-59, 62, 64, 69-72 (graphs) Quiz 6.4-6.5	2
Chapter 7 – Systems and Matrices		
Section 7.1 – Solving Systems of Two Equations	p. 575 #3-15(x3) 21-42(x3), 43, 49, 53-54	1
Section 7.2 – Matrix Algebra	p. 590 #1-11odd, 17, 20, 23, 25, 31, 33, 35, 36, 41, 46	1
Section 7.3 – Multivariate Linear Systems	p. 605 #49-54, 67-68, 73, 74, 79	1
Section 7.4 – Partial Fractions	p. 614 #13-20	1
Section 7.5 – Systems of Inequalities in Two Variables	(Optional)	
Review	p. 626 Red Numbered Problems (skip 16, 23, 34, 60, 65, 70) Quiz 7.1-7.4 Conic Section Word Search	2
Chapter 8 – Analytic Geometry in Two and Three Dimensions		
Conic Section - Circles	Circles WS	1
Section 8.1 – Conic Sections and Parabolas (ppt)	p. 641 #3-9(x3), 32-36E, 50-56E p.641 #12-30(x3), 59, 60	2
Section 8.2 – Ellipses (ppt)	p. 653 #3-39 (x3) p.654 #45, 48, 49, 53, 58, 61, 62	2
Section 8.3 – Hyperbolas (ppt,video)	p. 663 #3-42 (x3), 49, 50, 60	2
Review	Quiz 8.1-8.3 NUMB3RS: The Harvest	2
Chapter 9 – Discrete Mathematics		
Section 9.1 – Basic Combinatorics (ppt)	p. 708 #1-17 odd, 19-22, 23-29 odd, 35-36, 40-42, 54-55	1

Section 9.2 – The Binomial Theorem	p. 715 #1-23 odd Binomial Worksheet	2
Section 9.3 – Probability	p. 728 #1-8, 11-22 p.729 #27, 29, 33, 34, 41-49odd Quiz 9.1-9.3	3
Section 9.4 – Sequences	p. 739 #1-19odd p.739 #21-35odd, 38	2
Section 9.5 – Series	p. 749 #1-21 odd p.750 #23-31odd, 37 Quiz 9.4-9.5	3
Chapter 10 – An <u>Intro.</u> to Calculus: Limits, Derivatives, and Integrals		
Section 10.1 – Limits and Motion: The Tangent Problem	p. 801 #1, 3, 4, 7-10, 15-19 odd, 23, 29, 31	1
Section 10.2 – Limits and Motion: The Area Problem	p. 810 #1-7 odd, 11, 19 p.811 #21-33odd, 45-46	2
Section 10.3 – More on Limits	p. 822 #1-25odd p. 822 #27-54(x3)	2
Section 10.4 – Numerical Derivatives and Integrals	p. 832 #11-19 odd	2
Power Rule	Power Rule Worksheet	1
Review	Pg. 802 #23,25,30 Pg. 810 #18,25 Pg. 822 # 3,4,12,15,22 Quiz 10.1-10.4	2
Review Final Exams		5

** Do the following if time permits.		
Section 8.4 – Translation and Rotation of Axes	p. 673 #21-30, 43-48	2
Section 8.5 – Polar Equations of Conics	p. 682 #1-20	1
Section 8.6 – Three-Dimensional Cartesian Coordinate System	p. 693 #1-31 odd, 35-44 Quiz 8.4-8.6	3
Section 9.7 – Statistics and Data (Graphical)	p. 768 #1-6, 13-16, 21	2
Section 9.8 – Statistics and Data (Algebraic)	p. 782 #1, 3, 13, 15, 19, 20-22, 25, 26, 33, 34, 41 Quiz 9.4-9.8	3
Section A.1 – Radicals and Rational Exponents		
Section A.2 – Polynomials and Factoring		
Section A.3 – Fractional Expressions		
Chapter B – Key Formulas		
Section B.1 – Formulas from Algebra		
Section B.2 – Formulas from Geometry		
Section B.3 – Formulas from Trigonometry		
Section B.4 – Formulas from Analytic Geometry		
Section B.5 – Gallery of Basic Functions		
Chapter C – Logic		
Section C.1 – Logic: An Introduction		
Section C.2 – Conditionals and Biconditionals		