

# Pre-Calculus Pacing Guide

# First Quarter

Week	One					Two				
Day	1	2	3	4	5	6	7	8	9	10
Section	1-1	1-1	1-2	1-2	1-3	1-4	1-5	Sup	Sup	
Topics	Functions And Domain	More on domain	Composition of functions	Iterations	Graphing and intercepts	Slope	Parallel and perpendicular lines	Quiz 1	Calculator packet	Quiz 2
HW	21-47 odd 48-54	Domain wkst		11-39 odd	15-34	11-26, 30-32, 35	12-20, 35-40			
Standard	NS 11-C-8 A11-A-3 & 11	NS 11-C-8 A11-A-3 & 11	NS 11-C-8 A11-A-3 & 11	NS 11-C-8 A11-A-3 & 11	NS 11-C-8 A11-A-3 & 11	NS 11-C-8 A11-A-3 & 11	NS 11-C-8 A11-A-3 & 11		Alg A11-4	

Week	Three					Four				
Day	11	12	13	14	15	16	17	18	19	20
Section	1-7			2-1	2-2	2-2	2-2		3-1	3-1
Topics	Piecewise functions	Piecewise functions	More on Piecewise	2x2 systems of equations	3x3 systems	3x3 on calculator	More on 3x3	Quiz 3	Odd functions	Even functions x-axis, y=x
HW	5, 6, 8-12, 14, 16, 32	19,20,28, 29,34,35, 37	Create own or wkst	17-29, 32-33 41, 43, 45	4-11, 19, 20, 28	12-18, 21-24, 27	Wkst		6-7, 14-20, 42	21-24
Standard	Alg A11.3 and 11.5	Alg A11.3 and 11.5	Alg A11.3 and 11.5	Alg D12.5 11.7 NS D11.4	Alg D11.9 and 12.5	NS D11.4 Alg D11.7	NS D11.4 Alg D11.7		Alg A11.3 11.5	Alg A11.3 11.5

Week	Five					Six				
Day	21	22	23	24	25	26	27	28	29	30
Section	3-1	3-2	Sup	3-3		3-4	3-4	3-4	3-5	3-5
Topics	Same	Family of functions	Practice on 3-1 and 3-2 project on GSP	Graphing inequalities	Quiz 4	Inverses	Inverses	Inverse Art Project	Discontinuity	End behavior
HW	25-30, 48-50	13-17,19-24, 41	Finish	13-29 odd		17-18, 20-23, 42	15, 16, 25-33, 45		Wkst	12-25
Standard	Alg A11.3 11.5	Alg A11.3 11.5 11.11		Alg A11.3		Alg 11.3 11.5 11.6 11.11	Alg 11.3 11.5 11.6 11.11			

Week	Seven					Eight				
Day	31	32	33	34	35	36	37	38	39	40
Section	3-6	3-6				Sup	Sup	Sup		
Topics	Increasing and decreasing	Inflection points	Quiz 5	Project on curve sketching	Project on curve sketching	Optimization	Quadratic regression	More on Quadratics	Optimization project	Optimization project presentation
HW	13-20	21-36				Wkst 1-6	Wkst 55, 61-64	Finish wkst		
Standard										

Week 9 – quarter 2 exam review and test

Also Proofs 1-3 Due this quarter

# Pre-Calculus Pacing Guide

# Second Quarter

Week	One					Two				
Day	1	2	3	4	5	6	7	8	9	10
Section	5-1	5-2	Sup	5-3		5-4		5-4 and 5-5	5-6	5-8
Topics	Standard trig position	Sohcahtoa All 6 ratios	Special right triangles	unit circle	Quiz 6	Applications of trig	Indirect measurement project	Arc-trig	Law of sines	Law of cosines
HW	5-1A	5-2A	Wkst	5-3A		5-4A	Worksheet	5-5A	5-6A	5-8A
Standard	Meas B11.2 Geom A11.4	Meas B11.2 Geom A11.4	Meas B11.2 Geom A11.4	Meas B11.2 Geom A11.4		Meas B11.2 Geom A11.4	Meas B11.2 Geom A11.4	Meas B11.2 Geom A11.4	Meas B11.2 Geom A11.4	Meas B11.2 Geom A11.4

Week	Three					Four				
Day	11	12	13	14	15	16	17	18	19	20
Section	5-8					6-1	6-3	6-3		6-4
Topics	Law of cosines	Quiz 7	Graphing calculator games	Graphing calculator games	Graphing calculator games	Radians	Graphing sine and cosine project	Graphing trig	Quiz 8	Amplitude and period
HW	5-8B					6-1A	6-3A	6-3B		6-4A
Standard	Meas B11.2 Geom A11.4									

Week	Five					Six				
Day	21	22	23	24	25	26	27	28	29	30
Section	6-4	6-5	6-5	6-5	7-1	7-1				
Topics	Amplitude and period	Trig graphs	Trig graphs	Trig graphs	Identities	Identities	Review	Quiz 9	Review	Quarterly exam
HW	6-4B	6-5A	6-5B	6-5C	7-1A	7-1B				
Standard										

## CHRISTMAS BREAK

Week	Seven					Eight				
Day	31	32	33	34	35	36	37	38	39	40
Section	7-2	7-2	7-2							
Topics	Trig proofs	Trig proofs	Trig proofs	Review	Quiz 10	Regression project	Regression project	Regression project	Regression project	Regression project
HW	7-2A	7-2A	7-2A							
Standard										

Also proof 4 – 6

# Pre-Calculus Pacing Guide

# Third Quarter

Week	One					Two				
Day	1	2	3	4	5	6	7	8	9	10
Section	8-1	8-1	8-2	8-2	8-3		8-4	8-5	8-5	8-5
Topics	Basics of vectors	Basics of vectors	Algebraic vectors	Algebraic vectors	3D vectors	Quiz 11	Perpendicular vectors	Vector applications	Vector applications	Vector applications
HW	8-1A	8-1B	8-2A	8-2B	8-3A		8-4A	8-5A	8-5B	8-5C
Standard										

Week	Three					Four				
Day	11	12	13	14	15	16	17	18	19	20
Section	8-5						11-1	11-1	11-2	11-3
Topics	Vector applications	Quiz 12	Factoring review	Factoring review	Factoring review	<i>Quiz 12A</i>	Exponent rules	Exponent rules	Exponential functions	The number e
HW	8-5D		Packet pg 1	Packet pg 2	Packet pg 3		11-1A	11-1B	11-2A	11-2A
Standard										

Week	Five					Six				
Day	21	22	23	24	25	26	27	28	29	30
Section	11-3					11-4	11-4	11-5	11-6	
Topics	Continuous interest	<i>Investing project</i>	<i>Investing project</i>	<i>Investing project</i>	Quiz 13	Rewriting logs	Solving and manipulating logs	Common log	Natural log	Quiz 14
HW	11-3B					11-4A	11-4B	11-5A	11-6A	
Standard										

Week	Seven					Eight				
Day	31	32	33	34	35	36	37	38	39	40
Section	Sup	Sup	12-1	12-1	12-2	12-2				
Topics	<i>Exponential project 2</i>	<i>Exponential project 2</i>	Arithmetic sequence	Arithmetic series	Geometric sequence	Geometric series	Quiz 15	Review	Review	Quarterly
HW			12-1A	12-1B	12-2A	12-2B				
Standard										

**Extra project: GPS**                      **also proof 7-9**

**Week 9 – quarter 3 exam review and test**

# Pre-Calculus Pacing Guide

# Fourth Quarter

Week	One					Two				
Day	1	2	3	4	5	6	7	8	9	10
Section	12-3	12-3	12-4	12-4	Sup	12-5	12-5		Sup	Sup
Topics	Limit at infinity	sum of geometric series	Converge or diverge for series	Converge or diverge for series	<i>Converge or diverge on calculator</i>	Sigma notation	Sigma with factorials	Quiz 16	Pascal's triangle project	Pascal's triangle project
HW	12-3A	12-3B	12-4A	12-4B	<i>Wkst</i>	12-5A	12-5B			
Standard										

Week	Three					Four				
Day	11	12	13	14	15	16	17	18	19	20
Section	9-1	9-1	Sup	9-3	9-3					
Topics	Polar pts	Polar constant graphs	Graphing polar points project	Converting between polar and rectang.	Converting between polar and rectang.	Quiz 17	Derivative Project	Derivative Project	Review	Quarterly 4
HW	9-1A	9-1B	workshet	9-3 A	9-3B					
Standard										

Week	Five					Six				
Day	21	22	23	24	25	26	27	28	29	30
Section										
Topics	Capstone projects	Capstone projects	Capstone projects	Capstone projects	Capstone projects	Capstone projects	Capstone projects	Capstone projects	Capstone projects	Capstone projects
HW										
Standard										

Week	Seven					Eight				
Day	31	32	33	34	35	36	37	38	39	40
Section										
Topics	Capstone projects	Capstone projects	Capstone projects	Capstone projects	Capstone projects	Work on product	Work on product	Work on product	Work on product	Work on product
HW										
Standard										

**Extra Time: Derivative Project**  
**Week 9 – presentations**

## **Pre-Calculus Credit Flexibility**

### **Requirements:**

1. Quarter 1 Exam with a C- or better (78% or above).
2. Quarter 1 Projects: Project on curve sketching, Project on curve sketching, Optimization project, Proofs 1-3.
3. Quarter 2 Exam with a C- or better (78% or above).
4. Quarter 2 Projects: indirect measurement project, calculator programming project, trigonometric regression project, Proofs 4-6.
5. Quarter 3 Exam with a C- or better (78% or above).
6. Quarter 3 Projects: Personal Finance Project, Exponential Regression Project, Pascal's Triangle Project, Derivatives Project, Proofs 7-9.
7. Quarter 4 Exam with a C- or better (78% or above).
8. Completion of the Capstone Project with a C- or better (78% or above).