

THE COLLEGE OF STATEN ISLAND, CUNY
DEPARTMENT OF MATHEMATICS

**MATH 123 – COLLEGE ALGEBRA AND TRIGONOMETRY
COURSE OUTLINE**

Text: Stewart, Redlin, Watson, Precalculus, 7th Edition with WebAssign.
Brooks/Cole, Cengage Learning (2015). ISBN# 978-1305071759

Calculator: A graphing calculator is required. The TI-84 is highly recommended.

Note: Below, each lesson corresponds to a one-hour class. Homework problems must be submitted online using WebAssign.

Lesson	Section	Topic	Homework Problems
1	1.2	Exponents and Radicals	35,42,44,65,68,70,76,95
2	1.3	Algebraic Expressions	23,52,73,81,96,121,127
3	1.4	Rational Expressions	12,22,32,44,54,73,76,80,82
4	1.5	Solving Equations	22,28,29,38,51,89,90,99,113
5	1.5	Solving Equations	
6	1.7	Modeling with Equations	25,31,39,43,53,55,64,71,75,90
7	1.7	Modeling with Equations	
8	1.8	Inequalities	34,35,37,51,53,83,85,101,102,121
9	1.10	Equations of Lines	17,19,22,28,34
10	1.10	Parallel and Perpendicular Lines	43,46, 47, 50,51
11	2.1	Functions	23,31,36,55,56,85,90
12	2.2	Graphs of Functions	17,24,28,34,49,51
13	2.2	Graphs of Functions	53,69,70
14	2.5	Slope as Rate of Change	41, 42, 45, 46, 49, 50
15		Review	
16		Review	
17		Exam 1	
18		Exam 1	
19	2.6	Transformations of Functions	7,8,21,22,48
20	2.6	Transformations of Functions	63,65,67,68,74,77,78,85
21	3.1	Quadratic Functions	11,15,17,19,25
22	3.1	Max/min Values of Quadratic Functions	51,56
23	Focus	Modeling with Functions	(p.242) 19,20,21,24,26,29
24	3.1	Modeling with Quadratic Functions	51,52,53,63,65
25	4.1	Exponential Functions	22,23,32,34,46
26	4.2	Natural Exponential Function	13,14,23,34,35,37
27	4.3	Logarithmic Functions	16,24,29,31,44,56,90,98

28	4.3	Logarithmic Functions	
29	4.4	Logarithmic Expressions	17,40,32,34,46,47,53,56,63
30	4.5	Exponential Equations	19,21,23,25,39,41
31	4.5	Logarithmic Equations	51,66,67,87,90,91
32	4.6	Exponential Growth	2,6,10,13,14,16
33	4.6	Exponential Growth	
34	4.6	Radioactive Decay	18,22,23,24,26
35		Review	
36		Review	
37		Exam 2	
38		Exam 2	
39	6.1	Angle Measure	10,19,33,41,47,48,54,59,64,68
40	6.2	Trigonometry of Right Triangles	3,7,10,17,20
41	6.2	Trigonometry of Right Triangles	33,38,43,48
42	6.2	Trigonometry of Right Triangles	53,57,59,60
43	6.3	Trigonometric Functions of Angles	7,14,21,42,46
44	6.3	Trigonometric Functions of Angles	50,51,53,55,65
45	6.4	Inverse Trigonometric Functions	7,8,9,13,19,39,40
46	6.5	The Law of Sines	4,10,17,24,30,31,33,37
47	6.6	The Law of Cosines	6,11,16,22,32,34,41,43
48	Ch. 6	Applications of Trigonometry	(p.531) 10,21
49	Ch. 6	Applications of Trigonometry	(p.534) 1,2,3,4,6,7
50		Review	
51		Review	
52		Exam 3	
53		Exam 3	
54		Final Review	
55		Final Review	
56		Final Review	