

THE COLLEGE OF STATEN ISLAND, CUNY  
DEPARTMENT OF MATHEMATICS**MATH 125 – ALGEBRA AND TRIGONOMETRY  
COURSE OUTLINE**

**Text:** Stewart, Redlin, Watson. **Algebra and Trigonometry 4th Edition.** Enhanced

WebAssign Edition. Cengage Learning (2014). ISBN-13: 978-1305071742

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	P.3	Integer Exponents	25,27,29,505,507,509,510
2	P.4	Exponents and Radicals	61,62,63,66,73,74,76,80
3	P.5	Algebraic Expressions	17,18,21,24,27,32,34,37,62
4	P.6	Factoring	11,15,17,18,23,25,40,67,69,70
5	P.7	Rational Expressions	9,12,13,18,19,25,27,34,41,43,44
6	P.7	Rational Expressions	
7	P.8	Solving Equations	19,27,29,34,36,37,42,44,46,55,57,63
8	P.8	Solving Equations	
9	P.9	Modeling with Equations	22,23,25,29,31,32,36,37,39,47
10	P.9	Modeling with Equations	
11	1.3	Equations of Lines	11,12,17,19,21,24,25,27
12	1.3	Parallel and Perpendicular Lines	39,40,41,43,44,47,49,50
13	1.5	Complex Numbers	8,9,15,19,20,25,29,32,36,53,55,61,62
14	1.5	Complex Numbers	
15	1.4	Solving Quadratic Equations	8,9,12,17,19,33,64,65
16	1.6	Solving other Types of Equations	6,7,27,37,38,49,50,53
17	1.7	Solving Inequalities	14,15,19,20,23,24,25,27,34,37,38,47
18	1.7	Solving Inequalities	
19	1.8	Solving Absolute Value Equations	10,12,13,14,15,16,17
20	1.8	Solving Absolute Value Inequalities	27,28,29,31,34,35,36,44
21		Review	
22		Review	
23		<b>Exam 1</b>	
24		<b>Exam 1</b>	
25	2.1	Functions	6,19,20,31,34,55,56,57,59,62,64,69
26	2.1	Functions	

27	2.2	Graphs of Functions	4,6,11,19,20,24,34,37,38,42,49
28	2.2	Graphs of Functions	
29	2.3	Getting Information from the Graph of a Function	17,18,19,21,31,33,37,40,43,45,59
30	2.3	Getting Information from the Graph of a Function	
31	2.4	Average Rate of Change of a Function	10,12,15,16,21,26,28
32	2.5	Linear Functions and Models	3,5,17,26,29,34,39
33	2.6	Transformations of Functions	7,9,10,15,20,21,24,32,48,63,67,74
34	2.6	Transformations of Functions	
35	3.1	Quadratic Functions	5,6,11,13,17,21,23,36,38
36	3.1	Quadratic Functions	
37	3.1	Modeling with Quadratic Functions	51,52,53,54,56,60,62,63
38	3.1	Modeling with Quadratic Functions	
39		Review	
40		Review	
41		<b>Exam 2</b>	
42		<b>Exam 2</b>	
43	4.1	Exponential Functions	7,12,19,23,27,30,34,37
44	4.2	The Natural Exponential Function	7,8,15,23,24,33,35,37
45	4.3	Logarithmic Functions	10,12,13,24,26,28,39,63,64,69
46	4.3	Logarithmic Functions	
47	4.4	Laws of Logarithms	31,36,39,40,44,47,51,53,54,56,62
48	4.4	Laws of Logarithms	
49	4.5	Exponential Equations	3,8,14,17,24,33,37,40,41
50	4.5	Exponential Equations	
51	4.5	Logarithmic Equations	51,62,67,68,89,90,93,95
52	4.5	Logarithmic Equations	
53	4.6	Modeling with Exponential Functions	2,3,5,6,18,19,20,22
54	4.6	Modeling with Exponential Functions	
55		Review	
56		Review	
57		<b>Exam 3</b>	
58		<b>Exam 3</b>	
59	5.1	Angle Measure	16,18,24,29,33,53,59,63
60	5.2	Trigonometry of Right Triangles	3,5,7,13,15,16,17
61	5.2	Trigonometry of Right Triangles	24,33,38,39,43,48,53,59,60
62	5.2	Trigonometry of Right Triangles	
63	5.3	Trigonometric Functions of Angles	6,7,9,13,14,17,21,41,42,43,47

64	5.3	Trigonometric Functions of Angles	
65	5.4	Inverse Trigonometric Functions	7,8,9,10,13,17,19,23,39
66	5.4	Inverse Trigonometric Functions	
67	5.5	The Law of Sines	4,5,6,13,19,20,33,34
68	5.5	The Law of Sines	
69	5.6	The Law of cosines	3,6,11,13,16,19,22,39
70	5.6	The Law of cosines	
71	5.6	Applications of Trigonometry	29,31,34,41,43
72	5.6	Applications of Trigonometry	
73		Review	
74		Review	
75		<b>Exam 4</b>	
76		<b>Exam 4</b>	
77		Final Review	
78		Final Review	
79		Final Review	
80		Final Review	

**Grading Policy:**

<b>Exam 1</b>	<b>15%</b>
<b>Exam 2</b>	<b>15%</b>
<b>Exam 3</b>	<b>15%</b>
<b>Exam 4</b>	<b>15%</b>
<b>Final Exam</b>	<b>30%</b>
<b>Homework (Online).</b>	<b>10%</b>