

The College of Staten Island

Department of Mathematics

COURSE OUTLINE

MATH 103 – Mathematical Ideas

TEXT: Mathematical Excursions: 2nd Edition by Aufmann/Lockwood/Nation/Clegg
Houghton Mifflin Company

REQUIRED: Scientific Calculator

Lesson	Section	Topic	Homework Assignment
1	1.1	Inductive and Deductive Reasoning	P.12/ 1,3,5,7,9,11,13,19,21,23,25,29
2	1.2	Problem Solving with Pattern	P24/ 1,3,5,7,11,13,17,21
3	1.3	Problem-Solving Strategies	P.41/ 1,3,5,7,9,11,12,13,14
4	4.1	Early Numeration System	P.185/ 1,2,3,4,25,27,33,35,45,47
5	4.2	Place-Value System	P.196/ 1,3,5,7,11,15,17,19,31,33,47,49
6	4.3	Different Base System	P.205/ 1,3,5,11,13,15,21,23,29,31
7	4.4	Arithmetic in Different Bases	P.218/ 1,2,3,4,13,15,17,25,27,39
8	4.5	Prime Numbers	P.228/ 1,2,3,4,5,11,13,14,17,21,22,31,32
9,10	4.6	Topics from Number Theory	P.240/ 1,2,3,4,14,15,16,17,23,29
11,12	5.1	First-Degree Equations and Formulas	P.258/ 1,3,5,9,11,17,19,25,35,42,43,47, 48,51,52,59a,b P.262/ 71,75,77,79,88,90.
13	5.2	Rate, Ratio, and Proportions	P.276/ 8,9,10,14,17,18,21,27-32
14	5.3	Percent	P.298/ 7,8,9,13,14,16,18,20,22,24,26,30,31,32,35
15	5.4	Second Degree Equations-Factoring, Quadratic Formula	P.316/ 5,7,9,10,11,21,23,27
16		REVIEW for Test #1	
17		TEST #1	

18,19	11.1	The Counting Principle	P.728/ 1,3,5,7,9,10,15,17,19,21,23,25
20,21	11.2	Permutations and Combinations	P.740/ 3,5,6,13,15,25,27,29,37,39,45-49,50,51,56,68-72
22,23,24	11.3	Probability and Odds	P.753/ 1,3,7,9,13,23,24,27,31,35-57 odd,59,60,61-64,67,69,71,74,77,79
25	11.4	Addition and Complement Rules	P.764/ 3,5,7,9,11,21,23,25,27,29,31,32,33
26,27	12.1	Measures of Central Tendency	P.803/ 1,3,5,6,11,13,15,17,19,21,23,27,29,31,33
28,29	12.2	Measures of Dispersion	P.815/ 1-5,7,9,13-16
30,31	12.4	Normal Distribution	P.844/ 3,5,6,7,8; P.864/ 14,15
32		Review for Test #2	
33		TEST #2	
34	8.1	Basic Concepts of Euclidean Geometry	P.464/ 1,,2,9,11,13,15,19,23,25,33,35,37,47
35,36	8.2	Perimeter and Area of Plane Figures	P.486/ 12-15,17-23 odd,31,33,35,47,49
37,38,39	8.3	Properties of Triangles	P.502/ 1-11 odd, 13,15,19,25,29,31,37,43,45
40,41	9.1	Traveling Roads and Visiting Cities	P.583/ 1-5,7,9,11,13,15,16,17-23 odd,24-26,28,30,33-39 odd,40
42,43	9.2	Efficient Routes	P.601/ 1,4,6,7,10,11-17 odd,21,24
44,45	9.3	Planarity and Euler's Graph	P.615/ 1-14,19,20,21
46,47	9.4	Map coloring and Graphs	P.628/ 1-14
48,49	10.1	Simple Interest	P.651/ 5-13 odd,19,21,23,33,35
50,51,52	10.2	Compound Interest	P.669/ 1-13 odd,23,25,29,31,41
53		Review for Test #3	
54		TEST #3	
55-56		Review for FINAL	

