MTH 221 FALL 2015

A.F. c/b

THE COLLEGE OF STATEN ISLAND

DEPARTMENT OF MATHEMATICS

Mth 221-Applied Finite Mathematics and Business Calculus

Finite Math and Business Calculus with WebAssign
Cengage Learning (2015). ISBN# 9781305749627
Calculator: A graphing calculator is required. The TI-84 is highly recommended
(This custom textbook for MTH 121-221 includes chapters 1-4 of Stewart/Redlin/Watson, Precalculus, 6th Edition, and chapters 9-13 of Harshbarger/Reynolds, Mathematical Applications 10th Edition.)
Note: Below, each lesson corresponds to a one-hour class.
Homework problems must be submitted online using WebAssign.

LESSON	*TOPIC*	*SECTION*	*HOMEWORK ASSIGNMENT*
1	***Lines, Average ROC***	***SRW 1.10,2.4***	***p. 115/ 1,3, 5, 15, 19, 31 35, p. 177/ 1,3,5,7,11***
2	***Quadratic Functions***	***SRW 3.1***	***p. 229/ 3,5,9,13,23,33,45***
3	Limits	9.1	p. 553/ 1, 7, 11, 13, 17, 21, 27.
4	Limits	9.1	p. 555 /57, 59, 61, 67.
5	Continuous Functions	9.2	p. 564/ 3, 5, 9, 11, 15, 21.
6	Limits at Infinity	9.2	p. 565/ 25, 31, 43, 45, 47.
7	The Derivative	9.3	p. 577/ 5, 9, 11, 13.
8	Rates of Change; tangent to a Curve	9.3	p. 578/ 29, 33, 35, 41.
9	Derivative Formulas	9.4	p. 588/ 1,5,9,13,19,23
10	Derivative Formulas	9.4	p. 589/ 27,47,49,51,53
11	Product & Quotient Rules	9.5	p. 596/ 3,7,11,15,43,45
12	The Chain Rule 7 Power Rule	9.6	p. 603/ 3,5,11,15,27,39,41
13	Using Derivative Formulas	9.7	p. 610/ 7,9,21,31,39,43,
14	Higher-Order Derivatives	9.8	p. 615/ 5,9,13,15,21,43
15	Applications of Derivatives	9.9	P. 624/ 3,9,11,13
16	Applications of Derivatives	9.9	P. 625/ 17,19,23,27,
17	REVIEW		
18 & 19	TEST # 1		
20	Relative Maxima & Minima	10.1	p. 647/ 5,7,11,17,27,

21	Curve Sketching	10.1	p. 648/ 33,45,47,51,55,
22	Concavity: Points of Inflection	10.2	p. 660/ 1,11,13,19
23	Concavity: Points of Inflection	10.2	p. 661/ 27,31,33,35,37
24	Optimization in Business & Economics	10.3	p. 671/ 3,5,9,11
25	Optimization in Business & Economics	10.3	p. 671/ 13,15,21,33
26	Applications of Maxima & Minima	10.4	p. 680 1,3,5,7
27	Applications of Maxima & Minima	10.4	p. 680/ 11,15,19, 23
28	Asymptotes	10.5	p. 689/ 1,3,7,11,17
29	Rational functions and Curve sketching	10.5	p. 690/ 19, 31,37,40,
30	Review		
31-32	Exam 2		
33	***Exponential Functions***	***SRW 4.1-4.2***	***p. 307/ 1,3,5,,9,15,19,27***
34	***Logarithmic Functions***	***SRW 4.3***	***p 322/ 1,3,5,7,11,17,23,33***
35	***Laws of the Logarithm***	***SRW 4.4***	***p 329/ 1,3,5,9,11,13,15,33***
36	Derivatives of Logarithmic Functions	***11.1***	p. 708/1, 3,5,7,11, 23, 31,45
37	Derivatives of Exponential Functions	11.2	p. 714/ 1,5,19,28,35,43,47
38	Implicit Differentiation	11.3	p. 724/ 3,9,23,55
39	Related Rates	11.4	p. 730/ 1,9,13,17,19,
40	Related Rates	11.4	P 731/ 2,14,18,20,21
41	Indefinite Integral	12.1	p. 753/ 1,5,9,27,41,45
42	Substitution (power rule)	12.2	p. 762/ 1,5,9,15,17,23,29
43	Substitution (power rule)	12.2	p. 762/ 39,43,45,47
44	Integrating Logarithmic & Exponential Functions	12.3	p. 771/ 1,3,17,19,29,45
45	Applications of indefinite Integrals	12.4	p. 780/ 1,5,7,9,11,15,21
46	Review		
47-48	Exam 3		
49	Area under the curve	13.1	p. 806/ 3,5,9,17,21,27
50	The definite integral	13.2	p. 816/ 1,15,21,27
51	The Fundamental Theorem of Calculus	13.2	p. 816/ 37,49,55
52	Area Between Two Curves	13.3	p. 825/ 5,7,17,41
53	Applications of Definite Integrals	13.4	p. 834/ 1,5,7,9
54	Applications of Definite Integrals	13.4	p. 835/ 13,17,25,27
55	Improper integrals	13.7	P 852/ 1, 5,13, 17.
56	REVIEW FOR THE FINAL EXAM		