

College of Staten Island
Department of Mathematics

COURSE OUTLINE
Mth 030 - Intermediate Algebra

Fall 2009/Sp10
DM, JCD

Text: Intermediate Algebra, by George Woodbury, Pearson, Addison Wesley with **MyMathLab Student Access Kit**; Pearson Custom Publishing (**Available only in the CSI Campus Bookstore**)

Calculator (No Graphing or Programmable Calculators)

Week	Lecture	Section	Topics	Homework Problems
I	1	1.3	Solving Linear Equations	Pg. 42: 15, 17,19, 20, 21, 23, 27, 29, 31, 33, 37, 39, 40, 41
	2	1.3	Equations in Fractional Form and Literal Equations	Pg. 43: 43, 44, 45, 46 Pg. 43: 53 – 61 odd
	3	1.3	Solving Absolute Value Equations	Pg.43: 63 – 71 odd, 75, 77, 93, 95
	4	1.4	Problem Solving – Applications of Linear Equations	Pg. 56: 10, 12, 15, 16,17
II	5	1.5	Solving Linear Inequalities	Pg. 72: 7, 9, 25, 27, 28, 31, 33, 35, 36
	6	1.5	Solving Absolute Value Inequalities	Pg. 74: 67, 69, 71, 73, 75, 77
	7	2.1	Rectangular Coordinate System Graphing using the Table method. Graphing Linear Equations in One Variable	Pg. 97: 13, 15, 17, 19, 22, 25, 27, 29, 31 Pg. 99: 40, 43, 44 Pg. 102: 77, 78, 79, 80
	8	2.1	Graphing Linear Equations in Two Variables by using Intercept method.	Pg. 99: 45, 46,47, 48, 49, 50, 51, 53, 54, 63, 65, 66, 67,73,75,76
III	9	2.2	Slope Formula Slopes of Horizontal and Vertical Lines	Pg. 117: 9, 11, 13, 15,16, 17, 19, 21, 22, 27, 29
	10	2.2	Equation of a Line - Slope Intercept Form Parallel and Perpendicular Lines	Pg. 118: 32, 33, 34, 36, 38, 42, 43, 44, 46 Pg. 123: 95, 97, 99, 101, 104, 107, 108
	11	2.2	Equation of a Line – Slope Intercept Form - Graphing	Pg. 118: 49, 53, 52, 57, 61, 65, 66, 67, 69 70, 75, 77, 76, 85
	12	2.3	Equation of a Line - Point Slope Form	Pg. 130: 3, 4, 6, 8, 10, 11, 12, 15, 17, 19, 21

IV	13	2.3	Equation of a Line – Point Slope Form – Graphing Parallel and Perpendicular Lines	Pg. 130: 27, 28, 29, 31,32, 35, 37, 40, 45, 51, 55, 57, 59, 61, 64, 65, 68
	14	2.4	Graphing Linear Inequalities	Pg. 144: 7, 8, 14, 15, 20, 25, 27, 31, 30, 37, 39, 41, 44, 46, 47, 49, 51, 53 (Table or Intercept Method)
	15		Review	Review Sheet Handout
	16		Exam #1	
V	17	3.1	Solving a System of Two Linear Equations by Graphing	Pg. 206: 9, 11, 14, 15, 16, 17, 19, 20
	18	3.1	Solving a System of Two Linear Equations by Substitution Method	Pg. 206: 23, 26, 27, 28, 29
	19	3.1	Solving a System of Two Linear Equations Addition Method	Pg. 206: 31, 32, 34, 36, 38, 41,42, 46, 47, 48
	20	4.3	Polynomials - Addition and Subtraction	Pg. 311: 11, 12, 30, 32, 33, 35, 36, 37, 38
VI	21	4.1 4.3	Review-Exponents-Product Rule Multiplying Polynomials	Pg. 312: 40, 43, 46, 48, 49, 51, 54, 56 - 59, 69, 71, 73, 75, 85 – 92
	22	4.4	Factoring - Common Factor	Pg. 321: 15, 21, 23, 27, 29, 32, 35, 37
	23	4.5	Factoring Trinomials $a = 1$	Pg. 334: 8, 9, 11, 14, 15, 19, 21, 26, 28, 37, 47, 49, 52, 53, 57
	24	4.5 4.6	Factoring Trinomials $a > 1$ Factoring Difference of Squares	Pg. 335: 67, 68, 71, 73, 75, 76, 79, 85, 87, 93, 96, 97, 100, 104, 107 Pg. 342: 7, 10, 12, 15, 17, 20, 21, 22
VII	25	4.8	Solving Equations and Problem Solving	Pg. 361: 5, 7, 11, 15, 17, 21, 23, 25, 27, 29, 35, 38, 41, 44, 50
	26	4.8	Solving Equations and Problem Solving	Pg. 362: 61, 63, 65, 74, 75, 77
	27		Review	Review Sheet Handout
	28		Exam #2	

VIII	29	5.1	Simplifying Rational Expressions	Pg. 381: 23, 24, 25, 27, 30, 31, 33, 35, 38, 43, 44, 47, 50,
	30	5.2	Rational Expressions - Multiply and Divide	Pg. 389: 6, 9, 11, 13, 15, 19, 21, 22, 40, 42, 43, 46, 48, 49, 51, 56
	31	5.3	Rational Expressions - Addition and Subtraction – Unlike Denominators	Pg. 402: 9, 11, 13, 14, 16, 17, 18, 21, 22, 25
	32	5.3	More Rational Expressions - Addition and Subtraction	Pg. 402: 28, 31, 37, 38, 40, 42, 43, 46, 48, 50, 52, 55, 57, 59, 66, 68, 71
IX	33	5.4	Complex Fractions	Pg. 410: 3, 5, 6, 7, 9, 11, 13, 19, 21, 23,
	34	5.5	Rational Equations	Pg. 419: 5, 7, 13, 17, 21, 25, 27, 31, 41, 43, 44, 55, 56, 59, 61
	35	5.7	Division of Polynomials	Pg. 441: 5, 7, 9, 13, 14, 21, 23, 27, 28, 29,
	36	4.1	Exponents	Pg. 288: 7, 11, 21, 23, 26, 33, 37, 39, 44, 47, 51, 53, 73, 87, 89, 90, 96
X	37	4.2	Negative Exponents	Pg. 298: 3, 7, 9, 11, 13, 15, 17, 18, 19, 20, 22, 23, 25, 27, 29, 31, 35, 37, 40, 42, 44, 46, 48, 51
	38	6.1	Roots and Radicals - Simplify	Pg. 460: 10, 12, 13, 15, 18, 19, 21, 24, 25, 30, 32, 43, 44, 47, 55, 56, 57, 59, 61, 69, 70
	39	6.2	Rational Exponents	Pg. 467: 3, 5, 7, 9, 10, 11, 15, 16, 23, 27, 29, 33, 37
	40	6.3	Simplifying, Adding, and Subtracting Radical Expression	Pg. 474: 4, 5, 6, 9, 15, 16, 21, 24, 31, 32, 36, 38, 43, 46, 50, 55, 57, 58
XI	41	6.4	Multiply and Divide Radical Expressions	Pg. 484: 7, 11, 19, 20, 23, 29, 30, 31, 34, 39, 40, 44, 45, 50, 51, 53, 55, 56
	42	6.5	Solving Radical Equations	Pg. 495: 7, 8, 13, 14, 18, 31, 34
	43		Review	Review Sheet Handout
	44		Exam #3	
XII	45	6.6	Complex Numbers (no Division)	Pg. 505: 8, 10, 15, 17, 18, 21, 22, 25, 31, 34, 35, 36, 47, 49, 51, 53, 58,
	46	7.1	Solving Quadratic Equations by Factoring and Square Roots	Pg. 523: 5, 7, 8, 11, 13, 17, 21, 23, 24, 25, 26, 27

	47	7.1	Solving Quadratic Equations using Completing the Square	Pg. 524: 35, 39, 54, 55, 56, 58, 61, 87, 88, 90, 92
	48	7.2	Quadratic Formula	Pg. 536: 8, 9, 11, 13, 19, 22, 27, 29,
XIII	49	7.4	Graphing a Parabola by plotting points & symmetry	Pg. 561: 9, 18, 23, 26, 29, 37, 39, 42, 52
	50	7.4	Graphing a Parabola using $y = (x - h)^2 + k$ or $y - k = (x - h)^2$	Pg. 561: 18, 19, 20, 21, 33, 35, 56, 55, 57 (use vertex point, y-intercept and axis of symmetry to graph)
	51	9.2	Graphing the Circle	Pg.769: 25, 26, 31, 35, 38, 39, 40, 45, 46, 47,54, 56, 57, 58
	52		Review	Review Sheet Handout
XIV	53		Exam #4	
	54		Final Exam Review	
	55		Final Exam Review	
	56		Final Exam Review	