

MS 112 Syllabus

Assign.	p	PROBLEMS##	TYPE OF PROBLEM
2.5BG	85	1-60	BACKGROUND : * Solving & Notation: Inequalities
2.6	94	23-26, 37, 38, 43-56	Solving: Continued & Compound Inequalities
7.5BG	386	1-48	BACKGROUND : * Writing Equations of Lines (WorkSheet has Answers in $y=mx+b$ form)
4.1BG	171	1-29, 32-46, 49, 50, 59-68	BACKGROUND : * Simplifying: Rational Expressions (Algebraic Fractions)
4.2BG	177	1-50	BACKGROUND : * Simplifying: Multiplication & Division of Rational Expressions
4.3BG	185	1-66	BACKGROUND : * Simplifying: Addition & Subtraction of Rational Expressions
4.4	194	1-60	Simplifying: More Addition & Subtraction of Rational Expressions & Complex Fractions
4.5A	201	1-10	Simplifying: Dividing Polynomials by a Monomial
4.5B	202	11-52	Simplifying: Polynomial Long Division
4.5C	202	53-64	Synthetic Division : Dividing Polynomials Without the Variables
4.6A	209	1-44	Solving: Fractional Equations (Some First Degree & Some Second Degree (Quadratic) results)
4.6B	210	45-60 (ALL)	Word Problems: For Ratios and Fractions
Ch4R	222	7-10, 15-33, 35	***REVIEW of Chapter 4
5.1BG	232	1-84	BACKGROUND : * Simplifying: With Integer Exponents: Numbers & Algebraic Expressions
5.2BG	243	1-74	BACKGROUND : * Simplifying: Roots & Radicals --Also: Rationalizing the Denominator
5.3BG	249	1-60, 65-74	BACKGROUND : * Simplifying & Combining Radicals
5.4A	256	1-52	Products of Radicals: Monomial & Binomial Expressions
5.4B	256	53-76	Simplifying: Rationalize Binomial Denominator
5.5	262	1-44	Solving: Equations Involving Radicals-- (45-52)# Bonus Questions Only
5.6A	267	1-30	Arithmetic: Evaluating Fractional Exponents - Link to Roots
5.6B	267	31-58	Notation: Exponent & Radical Form
5.6C	268	59-80	Simplifying: Using Exponent Rules with Fractional Exponents
5.6D	268	81-90	Simplifying: Using Exponent Rules to Simplify Products of Different Roots back to Radical Form
Ch5R	276	1-55	***REVIEW of Chapter 5
6.1A	286	9-26	Complex Numbers: Add & Subtract
6.1B	286	27-60	Complex Numbers: Converting from Radical Form
6.1C	287	61-100	Complex Numbers: Products & Quotients
6.2A	294	1-20	Solving: Quadratic Equations: Factoring
6.2B	294	21-26	Solving: Quadratic Equations: Radicals
6.2C	294	35-70	Solving: Quadratic Equations: "Extracting Roots"
6.2D	294	71-91	Word Problems: Using the Pythagorean Theorem
6.3A	300	1-38	Solving: Quadratic Equations By Completing the Square
6.3B	300	39-60	Solving: Quadratic Equations - Recognizing which Method to Use
6.4	308	1-18, 21-42, 47-50	Solving: Quadratic Equations By the Quadratic Formula (Note: SOLVE ONLY, but simplify!!!!)
6.5A	318	1-20	Solving: Determining Correct Method: Quadratic Equations
6.5B	318	21-32	Solving: Determining Correct Method: Fractional Equations
6.5C	318	33-40 (ALL)	Solving: "Quadratic Form" -- (75-81)# Bonus Questions Only
6.5D	318	41-54	Word Problems: "Number" Type & Geometry (45 & 46 need Quadratic Formula)
6.5E	319	55-58 (ALL)	Word Problems: D=RT
6.6	326	1-36	Solving: Quadratic & (Other Nonlinear) Inequalities-- (37-46)# Bonus Questions Only
Ch6R	329	1-8, 13-34, 36, 38-41, 43	***REVIEW of Chapter 6
8.1A	402	1-19	Functions: Evaluating
8.1B	404	34-51	Functions: Finding Domain (Not Responsible for Range on Test, unless a Bonus)
8.1C	404	60-67	Functions: Evaluating with Calculator (NO Calculators on this test - this is for practice with notation.)
8.2A	411	1-16	Graphing: Linear Functions
8.2B	411	17-22 (ALL)	Writing the Equation: Given Information about the Linear Function (Can do in $y=mx+b$ Form.)
8.3	423	1-26 (ALL)****	Graphing: Quadratic Functions Parabolas; Also be able to put into "Vertex Form"
8.4A	434	1-20 (ALL)****	Graphing: Quadratic Functions Parabolas; Using Zeros of the function to find Vertex
8.4B	434	21-38	Finding: x-intercepts; zeros of functions
8.4C	434	39-48	Word Problems: Maximum & Minimums
8.6	452	1-31	Functions: How to Combine (Note: You do not need to find the domain in this case)
Ch8R	463	1, 2, 4-9, 12, 13, 16, 18, 24-35	***REVIEW of Chapter 8
9.1	471	1-38	Synthetic Division: More Problems
9.2A	475	1-20 (Use Calculator for 15-20)	Remainder Theorem: For Polynomial Function $f(x)$, Use Division to Find $f(c)$, for a constant c (a number).
9.2B	476	21-44 (ALL)	Remainder & Factor Theorems: Use Division to Determine Factors of Polynomial
9.3	486	1-20 (ALL)****	Solving Polynomial Equations: Using Rational Root Theorem to Solve Higher Degrees
9.4	497	11-34	Graphing: Techniques for Polynomials
9.5	510	Graph: 1-10, 17, 18; (1-22)**	Graphing: Techniques for Rational Functions
Ch9R	522	1-15, 19-23	***REVIEW of Chapter 9
10.1	532	1-26	Solving: Exponential Equations (NO CALCULATORS!)
10.2	542	C: 1-38	Applications of Exponential Functions (USE CALCULATORS!)
10.4A	564	1-20	Notation: Correlation Between Logarithmic & Exponential Statements
10.4B	564	21-40	Evaluating: Logarithms Without Calculators
10.4C	564	41-50	Solving: Simple Logarithmic Equations (NO CALCULATORS!)
10.4D	565	69-88	Notation: Using Properties of Logarithms to Rewrite Expressions
10.4E	565	89-100	Solving: Logarithmic Equations Using Properties of Logarithms (NO CALCULATORS!)
10.6A	581	C: 1-16	Solving: Exponential Equations (USE CALCULATORS!) (17-20)# Bonus Questions Only
10.6B	581	21-30	Solving: More Logarithmic Equations (NO CALCULATORS!) (31, 32)# Bonus Questions Only
10.6C	582	C: 33-42	Evaluating: Logarithms - Change of Base (USE CALCULATORS!)
10.6D	582	C: 43-49, 51-54	Word Problems: Logs & Exponentials (USE CALCULATORS!) (50, 55-58)# Bonus Questions Only
Ch10R	585	1-24, 29-34, 56-62	***REVIEW of Chapter 10
13.1	693	1-8, 15-21	Circles: Equation in "Center - Radius Form"; Identify Center & Radius (No Graphing)
		##Do Odds, unless need extra or "ALL" is written	*"Background" will NOT be assigned. These are just for those that need to "BoneUp!"
			**Find Vertical & Horizontal Asymptotes for ALL!
			***ChR- NOT Assigned, SOME review problems for Tests, etc. Not necessarily a complete review.
			****These assignments will have Worksheets with modified instructions for the book problems.
		C: Calculator Exercises	#Possible source of Bonus Type Questions for Tests.