Algebraically Speaking…
Chalkdust – Intermediate Algebra (Alg2)
Fall Semester

Homework Assignments:

Chapter 1 – Fundamentals of Algebra:
Review as necessary to make sure you are up to speed on concepts covered.

_____ Lesson 1.1 – The Real Number System

_____ Lesson 1.2 – Operations with Real Numbers

_____ Lesson 1.3 – Properties of Real Numbers

_____ Lesson 1.4 – Algebraic Expressions

_____ Lesson 1.5 –Constructing Algebraic Expressions

_____ Chapter 1 Review Exercises
Work problems #1-103 odd

_____ Chapter 1 Practice Chapter Test (in book, p. 55)
Work all problems

Chapter2 – Linear Equations and Inequalities:

_____ Lesson 2.1 – Linear Equations:

Problems: # 1, 5, 7, 8, 9, 13, 15, 17, 23, 25, 29, 31, 35, 37, # 41, 45, 47, 51, 53, 57, 59, 61, 65, 69

_____ Lesson 2.2 – Linear Equations and Problem Solving:

Problems: # 3 – 9 odd, 15 – 35 odd, 39, 41, 47, 51, 53, 55, 59,

61, 65, 73, 77, 81, 85, 87, 91, 95 – 105 odd

_____ Lesson 2.3 – Business and Scientific Problems:

Problems: # 1, 9, 17-23 odd, 29, 35, 37, 39, 49-55 odd, # 59-69 odd, 73, 77, 81, 83

_____ Lesson 2.4 – Linear Inequalities

Problems: #5-10 all, 11, 15, 21, 27, 31, 37, 41, 51, 55, 61, 71, 75,

79, 83-89 odd, 93-105 odd, 109, 113-117 odd

_____ Lesson 2.5 – Absolute Value Equations and Inequalities:

Problems: #3, 5, 13, 17, 21, 23-29 odd, 35 – 39 odd, # 43-49 odd, 53, 57, 59, 63, 65, 67, 77-84 all, 89, 91

_____ Chapter 2 Review Exercises

Recommended Review Problems: #5, 7, 9, 13, 17-29 odd, 33, 39-51 odd, 55-61 odd, 68, 69-75 odd, 79, 87, 95, 97, 105-109 odd, 113-117 odd, 122, 123, 125, 129, 131

Chapter3 – Graphs and Functions:

_____ Lesson 3.1 – The Rectangular Coordinate System:
                        Problems: #11, 17, 21, 25, 27-43odd, 47-55odd, 61, 65, 67,
                                              # 69, 73, 77, 79, 83, 87, 93, 95, 99

_____ Lesson 3.2 – Graphs of Equations:
                        Problems: #1-7all, 9, 11, 15-19odd, 23, 25-29all, 33, 41,
                                              # 45-57odd, 69, 71, 75, 79, 83, 89, 95, 97,

_____ Lesson 3.3 – Slope and Graphs of Linear Equations:
                        Problems: #3, 5, 6, 7, 9-19odd, 23, 25, 29-37odd,
                                              # 45, 47, 53, 57, 61, 65, 73-81odd, 82, 85, 87

_____ Lesson 3.4 – Equations of Lines:
                        Problems: #1-5all, 9, 15, 19, 27-35odd, 39, 45, 51,
                                              # 55-65odd, 69, 71, 79, 81, 85, 89, 93

_____ Lesson 3.5 – Graphs of Linear Inequalities:
                        Problems: #1, 7, 9-14all, 17, 27-31odd, 35,
                                      #39-43odd, 47, 51-69odd

_____ Lesson 3.6 – Relations and Functions:
                        Problems: #1-5odd, 11-15all, 17-23odd, 29, 31,
                                      #39-47odd, 51-75odd, 79-99odd

_____ Lesson 3.7 – Graphs of Functions:
                        Problems: #1, 3, 7-15odd, 19, 25, 27, 33, 35, 37, 41, 43-
                46all

                                  #47(a, e, f), 49-77odd

_____ Chapter 3 Review Exercises
          Recommended Review Problems: #1-5odd, 9, 11, 15-21odd, 24, 25, 29,
                                      #39-47odd, 53-57odd, 61, 65, 67, 69-
                75all,
                                      #77, 83, 84, 93-99all, 99-103odd, 106,
                                      #107, 111-115odd, 117-122all, 123, 125

Chapter 4 – Systems of Equations and Inequalities

_____ Lesson 4.1 – Systems of Equations
　　　　　　　Problems:　　# 1, 5, 9 – 27odd, 31, 33, 35, 41, 45,
　　　　　　　　　　　　　# 53, 61, 63, 71, 73, 79, 81, 87, 89,
　　　　　　　　　　　　　# 95, 97, 103, 105, 111, 113

_____ Lesson 4.2 – Linear Systems in Two Variables
　　　　　　　Problems:　　# 1, 7, 9, 17, 19, 25, 27, 33, 35, 41-49odd,
　　　　　　　　　　　　　# 53, 57, 61-73odd, 77-83odd

_____ Lesson 4.3 – Linear Systems in Three Variables
　　　　　　　Problems:　　# 1, 3, 7, 11, 15, 17, 21, 23, 27, 31, 33, 37
　　　　　　　　　　　　　# 41 – 51 odd

_____ Lesson 4.4 – Matrices and Linear Systems
　　　　　　　Problems:　　# 1 – 13 odd, 17, 21, 31 – 37 odd,
　　　　　　　　　　　　　# 41 – 47 odd, 51 – 55 odd, 59, 63 – 85 odd

_____ Lesson 4.5 – Determinants and Linear Systems
　　　　　　　Problems:　　# 1, 5, 11, 13, 17, 23, 27, 31, 37, 43, 47, 49, 51,
　　　　　53,
　　　　　　　　　　　　　# 55, 57, 59, 63, 67, 69, 71, 73, 75, 79, 83, 87,
　　　　　　　　　　　　　89,
　　　　　　　　　　　　　# 91

_____ Lesson 4.6 – Systems of Linear Inequalities
　　　　　　　Problems:　　# 1, 3, 4, 5, 6, 11, 13, 31, 43,
　　　　　　　　　　　　　# 51-65 Odd

_____ Chapter 4 Review Exercises
　　　　Recommended Review Problems:　　# 1, 5, 9, 17, 23, 31, 45, 47, 49,
　　　　　　　　　　　　　　　　　　　# 63, 65, 69, 71, 73, 75, 79, 81,
　　　　　　　　　　　　　　　　　　　# 87, 89, 91

Chapter 5 – Polynomials and Factoring:

_____ Lesson 5.1. – Integer Exponents and Scientific Notation
                        Problems: # 1, 3, 9, 11, 13, 17, 19, 21, 29, 33, 37, 47,
                                     # 51-99 odd, 101, 105, 107, 115, 117, 125, 129,
                                     # 133-151 odd

_____ Lesson 5.2 – Adding and Subtracting Polynomials:
                        Problems: # 1, 5-17 odd, 19-26 all, 27, 29, 33, 35, 39, 41
                                     # 51-61 odd, 71, 73, 75, 81, 83, 87, 89,
                                     # 97-113 odd

_____ Lesson 5.3 – Multiplying Polynomials:
                        Problems: # 3, 7-15 odd, 21, 23, 29, 31, 33, 37, 41, 43, 53,
                                     # 61, 67, 69, 75-93 odd
                                     # 97, 99-111 odd

_____ Lesson 5.4 – Factoring by Grouping and Special Forms:
                        Problems: # 17-33 odd, 37, 41, 43, 47, 49,
                                     # 55-127 odd, 133, 135, 137, 141

_____ Lesson 5.5 – Factoring Trinomials:
                        Problems: # 1, 5-15 odd, 19, 37-49 odd,
                                     # 67-121 odd, 125-128 all

_____ Lesson 5.6 –Solving Polynomial Equations by Factoring:
                        Problems: # 1-111 odd

_____ Chapter 5 Review Exercises
            Recommended Review Problems: # 1-30 odd
                                            # 43, 45, 47, 48
                                            # 49-59 odd,
                                            # 65-87 odd,
                                            # 89, 90, 93-169 odd

Chapter 6 – Rational Expressions, Equations, and Functions:

_____ Lesson 6.1 – Rational Expressions and Functions
    Problems: # 3, 7, 11, 15, 19, 23, 25, 27, 31, 43, 47, 51, 55,
                 # 61, 65, 69, 71, 73, 75, 79, 83, 85, 87, 89, 91

_____ Lesson 6.2 – Multiplying and Dividing Rational Expressions
    Problems: # 9, 11, 15, 17, 19, 23, 25, 27, 29, 31, 33, 35, 37,
                 # 39, 41, 45, 47, 49, 51, 53, 55, 57, 59, 63, 65, 67, 69

_____ Lesson 6.3 – Adding and Subtracting Rational Expressions
    Problems: # 1, 9, 17, 21, 49, 51, 53, 55, 57,
                 # 61-79 odd

_____ Lesson 6.4 – Complex Fractions
    Problems: # 1, 5, 7, 11, 15, 19, 21, 23, 25, 29,
                 # 33, 37, 39, 41, 45, 47, 49, 51

_____ Lesson 6.5 – Dividing Polynomials and Synthetic Division
    Problems: # 5, 9, 13, 15, 19-29 odd, 35, 37, 41, 49, 51, 61, 65,
               # 67, 69, 71, 73-79 odd, 83, 91, 93

_____ Lesson 6.6 – Solving Rational Equations
    Problems: # 5, 7, 9, 11, 15, 19, 25, 29, 35, 39, 45, 47, 55,
               # 61, 63, 65, 67-75 odd

_____ Lesson 6.7 – Applications and Variations
    Problems: # 1-31 odd, 43, 47, 49, 53, 55, 61, 65, 69, 71

_____ Chapter 6 Review Exercises
    Problems: # 1, 3, 5, 6, 9, 11, 13, 15, 19, 22, 24, 25, 26, 28, 31, 33,
               # 41, 45, 47, 49, 51, 52, 54, 58, 59, 60, 61, 63, 65,
               # 67, 69, 71, 73, 75, 77, 79, 83, 89, 91, 93, 99, 102,
               # 103, 104, 107, 115, 117, 119, 121
               Also do 6.7 #14