

**Algebraically Speaking...**  
**Chalkdust - Intermediate Algebra (Alg2)**  
**Spring Semester**

**Homework Assignments:**

**Chapter 7 - Radicals and Complex Numbers:**

\_\_\_\_\_ Lesson 7.1 - Radicals and Rational Exponents

Problems: # 1 - 43 odd, 49, 55, 59, 63, 67, 69, 71, 75, 79,  
# 83, 87, 91, 93, 95, 97, 101, 105, 107, 109, 111,  
# 115, 117, 119, 121, 123, 125, 127, 129, 131, 133,  
# 137, 139, 141, 143, 145, 149, 153, 155, 157, 159,  
# 161, 163, 167, 169, 171

\_\_\_\_\_ Lesson 7.2 - Simplifying Radical Expressions

Problems: # 1, 5, 7, 13, 17, 19, 25, 29, 31, 35, 39, 43, 45, 49,  
# 53, 55, 61, 63, 67, 69, 73, 75, 77

\_\_\_\_\_ Lesson 7.3 - Adding and Subtracting Radical Expressions

Problems: # 2, 5, 8, 11, 13, 15, 19, 21, 23, 25, 27, 29, 35, 37,  
# 39, 41, 43, 45, 47, 49, 51, 53, 61, 63, 66, 67

\_\_\_\_\_ Lesson 7.4 - Multiplying and Dividing Radical Expressions

Problems: # 1, 9, 15, 23, 27, 29, 35, 41, 45, 49, 51, 53, 55,  
# 57, 63, 67, 71, 73, 75, 81, 83, 85, 89, 93, 95, 97,  
# 99, 103, 109, 111, 113

\_\_\_\_\_ Lesson 7.5 - Radical Equations and Applications

Problems: # 1, 5, 11, 13, 17, 21, 25, 27, 28, 31, 33, 35, 39, 45,  
# 47, 53, 55, 59, 65, 75, 77, 81, 85, 89, 91, 97,  
# 99, 105, 107

\_\_\_\_\_ Lesson 7.6 - Complex Numbers

Problems: #1, 5, 7, 9, 13, 17, 19, 23, 25, 27, 31, 35, 39, 43, 45,  
# 51, 55, 57, 61, 65, 69, 71, 77, 81, 85, 87, 91, 95,  
# 99, 101, 105, 107, 109, 113, 117, 121, 123, 127,  
# 129, 133, 135, 137, 139, 143, 145, 149,

\_\_\_\_\_ Chapter 7 Review Exercises

Problems: # 3, 15, 19, 21, 37, 39, 41, 43, 47, 49, 51, 52, 57,  
# 58, 61, 65, 67, 69, 70, 75, 79, 81, 85, 87, 91,  
# 93, 95, 97, 101, 103, 109, 111, 113, 115, 117, 11

## Chapter 8 - Quadratic Equations, Functions, and Inequalities:

### \_\_\_\_\_ Lesson 8.1 - Solving Quadratic Equations: Factoring and Special Forms

Problems: # 1, 5, 9, 11, 13, 15, 17, 19, 23, 27, 31, 35, 37, 41, 45,  
# 49, 51, 55, 57, 59, 63, 67, 71, 75, 79, 81, 83, 85,  
# 89, 91, 95, 97, 101, 103, 105, 107, 111, 115, 119,  
# 123, 127, 131, 133, 139

### \_\_\_\_\_ Lesson 8.2 - Completing the Square

Problems: # 3, 17, 21, 25, 29, 33, 37, 41, 45, 49, 51, 55, 59,  
# 61, 65, 67, 69, 71, 73, 75, 77, 79, 81, 85, 87,  
# 89, 91, 93

### \_\_\_\_\_ Lesson 8.3 - The Quadratic Formula

Problems: # 5, 9, 15, 21, 27, 31, 35, 41, 43, 45, 47, 49, 53,  
# 57, 61, 65, 69, 71, 73, 77, 81, 83, 85, 87, 89,  
# 91, 95, 97, 101,

### \_\_\_\_\_ Lesson 8.4 - Graphs of Quadratic Functions

Problems: # 1-6all, 7, 9, 11, 13, 17, 19, 21, 23, 25, 27, 29, 31, 33,  
# 35, 41, 45, 47, 51, 55, 59, 63, 67, 71, 73, 75, 77,  
# 79, 83, 85, 87, 89, 91, 93, 97, 101, 103, 105, 107

### \_\_\_\_\_ Lesson 8.5 - Applications of Quadratic Equations

Problems: # 1, 15, 19, 21, 23, 29, 31, 35, 37, 41, 45, 47, 49, 53,

### \_\_\_\_\_ Lesson 8.6 - Quadratic and Rational Inequalities

Problems: # 1, 7, 21, 25, 27, 31, 35, 39, 43, 47, 51, 53, 57,  
# 66, 69, 73, 77, 83, 87, 91, 95, 99, 101, 107, 109,  
# 111, 113, 115, 117

### \_\_\_\_\_ Chapter 8 Review Exercises

Problems: # 5, 9, 15, 21, 27, 29, 42, 45, 47, 49, 51, 53, 55, 57,  
# 61, 67, 68, 69, 70, 79, 81, 82, 84, 89, 91, 93, 95, 97

## Chapter 9 - Exponential and Logarithmic Functions:

### \_\_\_\_\_ Lesson 9.1 - Exponential Functions:

Problems: # 1-15 odd, 17, 19, 23, 25, 31, 33, 35, 40, 41, 45, 49,  
# 51, 57, 59-62 all, 63-73 odd, 82, 83, 85

### \_\_\_\_\_ Lesson 9.2 - Composite and Inverse Functions

Problems: # 1, 3, 7, 9, 21, 25, 27-33 odd, 35-40 all, 43, 45, 51,  
# 55, 59, 61, 63, 65, 67, 71, 75-78 all, 79, 8, 87,  
# 103, 107

### \_\_\_\_\_ Lesson 9.3 - Logarithmic Functions

Problems: # 1-23 odd, 25, 29, 35, 37, 41, 43, 45, 47, 51,  
# 53-56 all, 57, 61, 63, 65, 66, 67, 73, 81, 83,  
# 85, 87, 89, 93, 95-98 all, 101, 105, 109, 111,  
# 115, 119, 123, 125, 127

### \_\_\_\_\_ Lesson 9.4 - Properties of Logarithms

Problems: # 1, 3, 5, 7, 8, 9, 11, 13, 15, 17, 19, 21, 23, 41, 43, 45,  
# 47, 51, 55, 59, 63, 67, 71, 73, 75, 79, 83, 87, 90,  
# 93, 97, 101, 103, 105, 107, 113

### \_\_\_\_\_ Lesson 9.5 - Solving Exponential and Logarithmic Equations

Problems: # 1, 3, 5, 7, 11, 15, 21, 25, 29, 31, 33, 35, 37, 38,  
# 39, 43, 47, 51, 55, 59, 63, 67, 71, 75, 79, 83, 87,  
# 91, 93, 97, 101, 105, 109, 113, 117, 119, 123-131 odd

### \_\_\_\_\_ Lesson 9.6 - Applications

Problems: # 1, 2, 3, 5, 7, 8, 9, 11, 13-27 odd, 29, 33, 37, 47,  
# 61, 65, 69, 71, 73, 75, 79, 81, 83, 84

### \_\_\_\_\_ Chapter 9 Review Exercises

Problems: # 3, 7, 11, 28, 29, 31, 33, 39, 41, 43, 45, 47, 49, 83,  
# 85, 87, 89, 91, 93, 95, 97, 119, 121, 123, 125,  
# 127, 129, 131, 133, 135, 137, 139, 141,  
Also do 9.6 # 31, 73, 83, 84

## Chapter 10 - Conics:

### \_\_\_\_\_ Lesson 10.1 - Circles and Parabolas

Problems: # 1-6 all, 7-13 odd, 15, 19, 23, 27, 31, 35, 39,  
# 43, 45, 47-52 all, 53-81 odd, 85, 87,  
# 89-97 odd

### \_\_\_\_\_ Lesson 10.2 - Ellipses

Problems: # 1-6 all, 7, 11, 15, 17, 19, 23, 27, 29, 31,  
# 33-57 odd

### \_\_\_\_\_ Lesson 10.3 - Hyperbolas

Problems: # 1-6 all, 7-41 odd, 43-48 all

### \_\_\_\_\_ Lesson 10.4 - Solving Nonlinear Systems of Equations

Problems: # 1, 5, 7, 9, 13, 15, 17, 21, 25, 29, 31, 35, 39,  
# 43, 47, 51, 55, 59, 63, 67, 71, 75, 79,  
# 81, 83, 87

### \_\_\_\_\_ Chapter 10 Review Exercises

Problems: # 9, 11, 13, 15, 17, 19, 21, 23, 27, 31, 33, 35, 36,  
# 41, 43, 45, 47, 48, 55, 57, 59, 60, 61,  
Do also 10.1 #93

## Chapter 11 - Sequences, Series, and the Binomial Theorem:

### \_\_\_\_\_ Lesson 11.1 - Sequences and Series

Problems: # 1, 3, 5, 9, 13, 15, 19, 21, 23, 27, 29, 33, 37,  
# 39-42 all, 43, 47, 51, 55, 59, 63, 67, 69,  
# 71, 75, 77, 79, 83, 87, 91, 95, 99, 103, 107, 111

### \_\_\_\_\_ Lesson 11.2 - Arithmetic Sequences

Problems: # 1, 5, 9, 11, 15, 17, 21, 25, 29, 33, 37, 41, 43, 47,  
# 51, 53, 57, 61, 65, 69, 71, 75, 79, 83, 87, 89,  
# 93, 97, 101, 102, 103, 104, 107, 111, 113, 117,  
# 119, 121, 123, 131

### \_\_\_\_\_ Lesson 11.3 - Geometric Sequences and Series

Problems: # 1, 5, 9, 13, 17, 21, 25, 29, 33, 37, 39, 43, 47,  
# 51, 53, 57, 61, 65, 67-70 all, 71, 75, 77,  
# 81, 85, 89, 93, 97, 101, 107, 109, 115, 119

### \_\_\_\_\_ Lesson 11.4 - The Binomial Theorem

Problems: # 1-15 odd, 17, 21, 23, 25, 27, 31, 33, 37, 41, 43,  
# 47, 51

### \_\_\_\_\_ Chapter 11 Review Exercises

Problems: # 1, 3, 5, 7, 11, 13, 17, 19, 23, 24, 27, 29, 31, 33, 35,  
# 43, 44, 47, 51, 55, 57, 59, 61, 63, 65, 69, 70,  
# 76, 79, 80, 90, 91, 101, 102  
Do also 11.2 #131