Advanced Algebra Assignments
Fall 2023

TOPIC	ASSIGNMENT
Operations on Real Numbers	AI: 1.1: worksheet: all except 35, 36, 39; on 33 add "non-zero" before the word "rational."
Solving Linear Equations	AI: 1.2, 1.3a: worksheet: Evens
Problem Solving Using Algebraic Models	AI: 1.3b: Worksheet: Evens
Quiz Review	Review Worksheet: all
Slope-Intercept Form	AI: 2.1b: Worksheet: Do evens 18-34
Absolute Value Functions	AI: 5.1: Worksheet: Do 16 - 30 even, and 25, 27
Key Features of Functions	1.1: Worksheet: all except 17, 29, 33
Transformations of Functions	1.2: Worksheet: all except 17, 32, 33, 35-38; on 15, write as vertical stretch only
Piecewise-Defined Functions	1.3: Worksheet: all except 14, 19, 21, 23, 25, 27
Arithmetic Sequences and Series	1.4: Worksheet: all except 14, 16, 21, 25, 34, 36-38
AA Chapter 1, Part 1 Review	Review Worksheet: all except 15
Solving Equations and Inequalities by Graphing	1.5: Worksheet: all except 7, 8, 11, 13, 15, 19, 22-25, 31-32, 34, 35
Solving Linear Systems by Graphing	AI: 4.1: Worksheet: all except 12, 15, 20-23, 24, 26, 28-29
Solving Linear Systems by Substitution	AI: 4.2: Worksheet: all except 13, 16, 19, 29, 34-38
Solving Linear Systems by Elimination	AI: 4.3: Worksheet: all except 11, 12, 17, 18, 24, 30, 33-37, 39
Solving Systems Quiz Review	Review Worksheet: all. On #6, change system to $y = 3x + 2$ and $y = -x + 6$; on #7, change system to $y = -4x + 1$ and $y = 2x-5$; on #8 the line graphed goes through $(2,-1)$ and $(4, 2)$.
Solving Linear Systems of 3 Variables	1.6: Worksheet: all except 12, 13, 14, 31, 32, 35, 37, 38
Solving Linear Systems Using Matrices	1.7: Worksheet: all except 11, 13, 15, 16, 19, 20, 29, 33
AA Chapter 1 Part II Review	Review Worksheet: all
Vertex Form of a Quadratic Function	2.1: Worksheet: all except 13, 23, 28, 32, 34, 37, 38
Standard Form of a Quadratic Function	2.2: Worksheet: all except 12, 14, 21, 25, 26, 31
Factored (Intercept Form) of a Quadratic Function	2.3a: Worksheet

Factoring using GCF, $x^2 + bx + c$	AI: 7.4: Worksheet: all odds except 23, 25 43; Do 18, 38, 42;
Factoring using GCF, $x^2 + bx + c$	AI: 7.5: Worksheet: all odds except 11, 19, 41; Do 12, 20, 36
Factoring using $ax^2 + bx + c$	AI: 7.6: Worksheet: all odds except 19, 21, 51; do 50
Factoring Special Cases	AI: 7.7: Worksheet: all evens except 54; Do 19, 43, 49, 53
Factoring Review	Review Worksheet: all
Solving Equations by Factoring	2.3b: Worksheet: all except 10, 12, 20, 32, 33, 38, 42, 43, 45
AA Chapter 2 Part I Test Review	Review Worksheet: do 2-3, 6, 8-19, 21-29 (save worksheet for later)
Complex Numbers and Operations	2.4: Worksheet: all except 12, 13, 17, 19, 21, 29, 34-39, 46, 47, 50
Completing the Square	2.5: Worksheet: all except 11, 14, 16, 17, 19, 23, 35-38, 41, 42, 43-48, 51, 54
The Quadratic Formula	2.6: Worksheet: all except 9, 12, 13, 15, 19-21, 24, 28-31, 35, 36, 39
Linear-Quadratic Systems	2.7: Worksheet: all except 8-10, 25, 26, 27, 29
AA Chapter 2 Part II Test Review	Review Worksheet: do 4-5, 7, 30-34, 36-57
Graphing Polynomial Functions	3.1: Worksheet: All except 13, 14, 16, 17, 19, 20, 29, 32
Adding, Subtracting, and Multiplying Polynomials	3.2: Worksheet: All except 10, 11, 13, 26, 29-32
Polynomial Identities	3.3a: Worksheet: Do 19, 24, 26-51, 65
Polynomial Identities	3.3b: Worksheet: Do 18, 20-23, 25, 52-64, 68
Dividing Polynomials	3.4a: Worksheet: Do 10, 13-23, 33, 34
Dividing Polynomials	3.4b: Worksheet: Do 9, 24-31, 35, 36
Quiz Review	Review Worksheet: All
Zeros of Polynomial Functions	3.5: Worksheet: All except 6, 9, 18, 21, 25, 26, 30
Theorems About Roots of Polynomial Equations	3.6: Worksheet: All except 18, 19, 21, 23, 28, 29, 35, 37, 38
Chapter 3 Review	Review Worksheet: All
Final Exam Review	FR-R Final Review Worksheet: all