

College Algebra Pacing Guide

Unit 1: Linear, Quadratic and Polynomial Relationships

Chapter 1: Lines and Parabolas

- ___ 1.1 Modeling with Linear Functions
- ___ 1.2_Day 1 Characteristics of Quadratic Functions
- ___ 1.2_Day 2 Characteristics of Quadratic Functions
- ___ 1.4 Modeling with Quadratic Functions

Ch. 1 - Lines and Parabolas Test

Score _____

Chapter 2: Quadratic Equations and Complex Numbers

- ___ 2.0_Day 1 Factoring $x^2 + bx + c$
- ___ 2.0_Day 2 Factoring $ax^2 + bx + c$
- ___ 2.1_Day 1 Solving Quadratic Equations
- ___ 2.1_Day 2 Solving Quadratic Equations

Ch. 2 - Quad Equations and Complex Numbers Quiz

Score _____

- ___ 2.2_Day 1 Complex Numbers
- ___ 2.2_Day 2 Complex Numbers
- ___ 2.3 Completing the Square
- ___ 2.4_Day 1 Using the Quadratic Formula
- ___ 2.4_Day 2 Using the Quadratic Formula

Ch. 2 - Quad Equations and Complex Numbers Test

Score _____

Chapter 3: Polynomial Operations

- ___ 3.1_Day 1 Graphing Polynomial Functions
- ___ 3.1_Day 2 Graphing Polynomial Functions
- ___ 3.2_Day 1 Adding, Subtracting, and Multiplying Polynomials
- ___ 3.2_Day 2 Adding, Subtracting, and Multiplying Polynomials
- ___ 3.2_Day 3 Adding, Subtracting, and Multiplying Polynomials

Ch. 3 - Polynomial Operations Quiz

Score _____

- ___ 3.3_Day 1 Dividing Polynomials
- ___ 3.3_Day 2 Dividing Polynomials
- ___ 3.4_Day 1 Factoring Polynomials
- ___ 3.4_Day 2 Factoring Polynomials

Ch. 3 - Polynomial Operations Test

Score _____

*****End of First Quarter**

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Chapter 4: Solving Polynomial Functions

- ___ 4.1_Day 1 Solving Polynomial Equations
- ___ 4.1_Day 2 Solving Polynomial Equations
- ___ 4.1_Day 3 Solving Polynomial Equations
- ___ 4.2_Day 1 The Fundamental Theorem of Algebra
- ___ 4.2_Day 2 The Fundamental Theorem of Algebra

Ch. 4 - Solving Polynomial Functions Quiz

Score _____

- ___ 4.3 Analyzing Graphs of Polynomial Functions
- ___ 4.4 Modeling with Polynomial Functions

Ch. 4 - Solving Polynomial Functions Test

Score _____

Unit 1: Linear, Quadratic, and Polynomial Relationships Test

Score _____

Unit 1: Math Journal Entries

Score/Average _____

Unit 2: Radical, Rational, Exponential, and Logarithmic Functions

Chapter 5: Radical and Rational Functions

- ___ 5.1 nth Roots and Rational Exponents
- ___ 5.2_Day 1 Properties of Rational Exponents and Radicals
- ___ 5.2_Day 2 Properties of Rational Exponents and Radicals

Ch. 5 - Radical and Rational Functions Quiz

Score _____

- ___ 5.4_Day 1 Solving Radical Equations and Inequalities
- ___ 5.4_Day 2 Solving Radical Equations and Inequalities
- ___ 5.5 Performing Function Operations
- ___ 5.6_Day 1 Inverse of a Function
- ___ 5.6_Day 2 Inverse of a Function

Ch. 5 - Radical and Rational Functions Test

Score _____

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Chapter 6: Exponential and Logarithmic Functions

___ 6.1_Day 1 Exponential Growth and Decay Functions

___ 6.1_Day 2 Exponential Growth and Decay Functions

___ 6.2 The Natural Base e

___ 6.3_Day 1 Logarithms and Logarithmic Functions

___ 6.3_Day 2 Logarithms and Logarithmic Functions

Ch. 6 - Exponential and Logarithmic Functions Quiz **Score** _____

___ 6.5_Day 1 Properties of Logarithms

___ 6.5_Day 2 Properties of Logarithms

___ 6.6_Day 1 Solving Exponential and Logarithmic Equations

___ 6.6_Day 2 Solving Exponential and Logarithmic Equations

Ch. 6 - Exponential and Logarithmic Functions Test **Score** _____

***End of Second Quarter / First Semester

Chapter 7: Rational Functions

___ 7.1 Inverse Variation

___ 7.2_Day 1 Graphing Rational Functions

___ 7.2_Day 2 Graphing Rational Functions

___ 7.3_Day 1 Multiplying and Dividing Rational Expressions

___ 7.3_Day 2 Multiplying and Dividing Rational Expressions

Ch. 7 - Rational Functions Quiz **Score** _____

___ 7.4_Day 1 Adding and Subtracting Rational Expressions

___ 7.4_Day 2 Adding and Subtracting Rational Expressions

___ 7.5 Solving Rational Equations

Ch. 7 - Rational Functions Test **Score** _____

Unit 2: Radical, Rational, Exponential and Logarithmic Functions Test

Score _____

Unit 2: Math Journal Entries

Score/Average _____

College Algebra Pacing Guide

Unit 3: Transformations, Systems of Equations and Matrices

Chapter 8: Transformations

___ 8.1_Day 1 Parent Functions and Transformations

___ 8.1_Day 2 Parent Functions and Transformation

___ 8.2_Day 1 Transformations of Linear and Absolute Value Functions

___ 8.2_Day 2 Transformations of Linear and Absolute Value Functions

Ch. 8 - Transformations Quiz **Score** _____

___ 8.3 Transformations of Quadratic Functions

___ 8.4 Transformations of Polynomial Functions

___ 8.5 Graphing and Transformations of Radical Functions

___ 8.6_Day 1 Transformations of Exponential and Logarithmic Functions

___ 8.6_Day 2 Transformations of Exponential and Logarithmic Functions

Ch. 8 - Transformations Test **Score** _____

Chapter 9: Systems of Equations and Matrices

___ 9.1 Solving Linear Systems

___ 9.2 Solving Nonlinear Systems

___ 9.3 Quadratic Inequalities

Ch. 9 - Systems of Equations and Matrices Quiz **Score** _____

___ 9.4 Matrix Operations

___ 9.5 Multiplying Matrices

Ch. 9 - Matrices and Determinants Quiz **Score** _____

___ 9.6 Determinants and Cramer's Rule

___ 9.7 Identity and Inverse Matrices

___ 9.8 Solving Systems Using Inverse and Augmented Matrices

Ch. 9 - Matrices and Determinants Test **Score** _____

Unit 3: Transformations, Systems and Matrices Test **Score** _____

Unit 3: Math Journal Entries **Score/Average** _____

*****End of Third Quarter**

College Algebra Pacing Guide

Unit 4: Conic Sections, Sequence and Series

Chapter 10: Conic Sections

___ 10.1 Conic Section Overview

___ 10.2 Focus of a Parabola

Ch. 10 - Conic Sections Quiz

Score _____

___ 10.3_Day 1 The Ellipse

___ 10.3_Day 2 The Ellipse

___ 10.4_Day 1 The Hyperbola

___ 10.4_Day 2 The Hyperbola

___ 10.4_Day 3 The Hyperbola

Ch. 10 - Conic Sections Test

Score _____

Chapter 11: Sequences and Series

___ 11.1_Day 1 Defining and Using Sequences and Series

___ 11.1_Day 2 Defining and Using Sequences and Series

___ 11.1_Day 3 Defining and Using Sequences and Series

___ 11.2_Day 1 Analyzing Arithmetic Sequences and Series

___ 11.2_Day 2 Analyzing Arithmetic Sequences and Series

Ch. 11 - Sequences and Series Quiz 1

Score _____

___ 11.3_Day 1 Analyzing Geometric Sequences and Series

___ 11.3_Day 2 Analyzing Geometric Sequences and Series

___ 11.4 Finding Sums of Infinite Geometric Series

Ch. 11 - Sequences and Series Quiz 2

Score _____

___ 11.5 Using Recursive Rules with Sequences

___ 11.6_Day 1 Counting Principles

___ 11.6_Day 2 Counting Principles

Ch. 11 - Sequences and Series Test

Score _____

Unit 4: Conic Sections, Sequences and Series Test

Score _____

Unit 4: Math Journal Entries

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Unit 5: Mini ACT Review Unit (Optional) - highly recommended for Juniors before April

Trigonometric Ratios and Functions

___ 9.1 Right Triangle Trigonometry

___ 9.2_Day 1 Angles and Radian Measure

___ 9.2_Day 2 Angles and Radian Measure

___ 9.3 Trigonometric Functions of Any Angle

Trigonometric Ratios and Functions Test

Score _____

*****End of Fourth Quarter / Second Semester**