

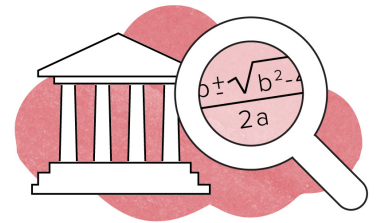
College Math Readiness

This goal contains the following study paths:

1. **College Math Readiness 1** (*NROC Developmental Math Units 1-9*)
2. **College Math Readiness 2** (*NROC Developmental Math Units 10-14*)
3. **College Math Readiness 3** (*NROC Developmental Math Units 15-19*)

Students can access the study paths in the displayed order.

This study path allows students to work in the full [NROC Developmental Math curriculum](#), but in smaller, focused study paths that we know work best for adult learners. Only 'College Math Readiness 1' is unlocked by default, but the next study path in the sequence will automatically be unlocked when students reach their target score (90).



STUDY PATH 1: College Math Readiness 1



Unit 1: Whole Numbers

Introduction to Whole Numbers

- Place Value and Names for Whole Numbers
- Rounding Whole Numbers
- Comparing Whole Numbers

Adding and Subtracting Whole Numbers

- Adding Whole Numbers and Applications
- Subtracting Whole Numbers and Applications
- Estimation

Multiplying and Dividing Whole Numbers

- Multiplying Whole Numbers and Applications
- Dividing Whole Numbers and Applications

Properties of Whole Numbers

- Properties and Laws of Whole Numbers
- The Distributive Property

Exponents, Square Roots, and Order of Operations

- Understanding Exponents and Square Roots
- Order of Operations



Unit 2: Fractions and Mixed Numbers

Introduction to Fractions and Mixed Numbers

- Introduction to Fractions and Mixed Numbers
- Proper and Improper Fractions
- Factors and Primes
- Simplifying Fractions
- Comparing Fractions

Multiplying and Dividing Fractions and Mixed Numbers

- Multiplying Fractions and Mixed Numbers
- Dividing Fractions and Mixed Numbers

Adding and Subtracting Fractions and Mixed Numbers

- Adding Fractions and Mixed Numbers
- Subtracting Fractions and Mixed Numbers



Unit 3: Decimals

Introduction to Decimals

- Decimals and Fractions
- Ordering and Rounding Decimals

Decimal Operations

- Adding and Subtracting Decimals
- Multiplying and Dividing Decimals
- Estimation With Decimals



Unit 4: Ratios, Rates, and Proportions

Ratios and Rates

- Simplifying Ratios and Rates

Proportions

- Understanding Proportions



Unit 5: Percents

Introduction to Percents

- Convert Percents, Decimals, and Fractions

Solving Percent Problems

- Solving Percent Problems



Unit 6: Measurement

U.S. Customary Units of Measurement

- Length
- Weight
- Capacity

Metric Units of Measurement

- The Metric System
- Converting Within the Metric System
- Using Metric Conversions to Solve Problems

Temperature

- Temperature Scales



Unit 7: Geometry

Basic Geometric Concepts and Figures

- Figures in 1 and 2 Dimensions
- Properties of Angles
- Triangles
- The Pythagorean Theorem

Perimeter, Circumference, and Area

- Quadrilaterals
- Perimeter and Area
- Circles

Volume of Geometric Solids

- Solids



Unit 8: Concepts in Statistics

Statistical Graphs and Tables

- Graphing Data
- Other Types of Graphs

Measures of Center

- Measures of Center

Graphical Representations

- Use and Misuse of Graphical Representations

Probability

- Probability



Unit 9: Real Numbers

Introduction to Real Numbers

- Variables and Expressions
- Integers
- Rational Real Numbers

Operations With Real Numbers

- Adding Integers
- Adding Real Numbers
- Subtracting Real Numbers
- Multiplying and Dividing Real Numbers

Properties of Real Numbers

- Associative, Commutative, and Distributive Properties

Simplifying Expressions

- Order of Operations

STUDY PATH 2: College Math Readiness 2



Unit 10: Solving Equations and Inequalities

Solving Equations

- Solving One-Step Equations Using Properties of Equality
- Solving Multi-Step Equations
- Special Cases and Applications
- Formulas

Solving Inequalities

- Solving One-Step Inequalities
- Multi-Step Inequalities

Compound Inequalities and Absolute Value

- Compound Inequalities
- Equations and Inequalities and Absolute Value



Unit 11: Exponents and Polynomials

Integer Exponents

- Exponential Notation
- Simplify by Using the Product, Quotient, and Power Rules
- Products and Quotients Raised to Powers
- Scientific Notation

Polynomials With Single Variables

- Introduction to Single Variable Polynomials
- Adding and Subtracting Polynomials
- Multiplying Polynomials
- Multiplying Special Cases
- Dividing by a Monomial
- Dividing by Binomials and Polynomials

Polynomials With Several Variables

- Simplifying and Evaluating Polynomials With More Than One Term
- Operations With Polynomials



Unit 12: Factoring

Introduction to Factoring

- Greatest Common Factor

Factoring Polynomials

- Factoring Trinomials
- Factoring: Special Cases
- Special Cases: Cubes

Solving Quadratic Equations

- Solve Quadratic Equations by Factoring



Unit 13: Graphing

Graphs and Applications

- The Coordinate Plane
- Graphing Linear Equations

Slope and Writing the Equation of a Line

- Finding the Slope of a Line
- Writing the Equation of a Line
- Parallel and Perpendicular Lines
- Graphing Linear Inequalities



Unit 14: Systems of Equations and Inequalities

Graphing Systems of Equations and Inequalities

- Graphing Systems of Linear Equations
- Graphing Systems of Inequalities

Algebraic Methods to Solve Systems of Equations

- The Substitution Method
- The Elimination Method

Systems of Equations in Three or More Variables

- Solving Systems of Three Variables

STUDY PATH 3: College Math Readiness 3



Unit 15: Rational Expressions

Operations With Rational Expressions

- Introduction to Rational Expressions
- Multiplying and Dividing Rational Expressions
- Adding and Subtracting Rational Expressions
- Complex Rational Expressions

Rational Equations

- Solving Rational Equations and Applications

Formulas and Variation

- Rational Formulas and Variation



Unit 16: Radical Expressions and Quadratic Equations

Introduction to Roots and Rational Exponents

- Roots
- Squares, Cubes, and Beyond
- Rational Exponents

Operations With Radicals

- Multiplying and Dividing Radical Expressions
- Adding and Subtracting Radicals
- Multiplication of Multiple Term Radicals
- Rationalizing Denominators

Radical Equations

- Solving Radical Equations

Complex Numbers

- Complex Numbers
- Operations With Complex Numbers

Solving Quadratic Equations

- Square Roots and Completing the Square
- The Quadratic Formula



Unit 17: Functions

Introduction to Functions

- Identifying Functions

Using Functions

- Evaluating Functions
- Graphing Types of Functions
- Finding Domain and Range

Operations With Functions

- Arithmetic Operations With Functions



Unit 18: Exponential and Logarithmic Functions

Exponential Functions

- Introduction to Exponential Functions

Logarithmic Functions

- Introduction to Logarithmic Functions
- Properties of Logarithmic Functions

Natural Logarithms

- Introduction to Natural and Common Logarithms

Logarithmic and Exponential Equations

- Solving Exponential and Logarithmic Equations
- Mathematical Modeling With Exponential and Logarithmic Functions



Unit 19: Trigonometry

Introduction to Trigonometric Functions

- Identifying the Six Trigonometric Functions
- Right Triangle Trigonometry
- Unit Circle Trigonometry

Graphing Trigonometric Functions

- Degree and Radian Measure
- Graphing the Sine and Cosine Functions
- Amplitude and Period