Algebra I | Montana PK–12 Mathematics Content Standards (2026) Correlation to *Eureka Math²® (2027)*

Eureka Math² is a research-proven math curriculum that empowers teachers to center instructional techniques on student success. Teachers can foster more "aha!" learning moments by providing the support needed for all learners to build a more confident math mindset.

This *Eureka Math²* edition builds on a strong foundation of effective instruction. It provides teachers with guidance on delivering rigorous instruction that honors student choice and encourages confident problem-solving.

Eureka Math² carefully sequences mathematical content to maximize vertical alignment from kindergarten through high school. This kind of sequencing has proven to be essential in students' mastery of math.

Teachability

Eureka Math² employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering high-quality instruction that meets the individual needs of their students. Differentiation suggestions, slide decks, digital interactives, and multiple forms of assessment are just a few of the resources built into the teacher materials.

Accessibility

Eureka Math² incorporates Universal Design for Learning (UDL) principles so all learners can access the mathematics and take on challenging math concepts. UDL, Differentiation, and Multilingual Learner supports are built into the instructional design and are clearly identified in the *Teach* book.

The curriculum also carries a focus on readability. By eliminating unnecessary words and using clear sentences, the *Eureka Math²* teacher–writers have created one of the most readable mathematics curricula on the market. The curriculum's readability and accessibility help all students see themselves as mathematical thinkers and doers who are fully capable of owning their mathematics learning.

Math Confidence

Eureka Math² fosters a classroom culture of learning by encouraging student-led discourse and cognitive engagement that results in confident learners. By leveraging consistent models, routines, and progressions, teachers can remove barriers and allow all students an avenue to success. Within the digital platform, each grade includes wordless videos and digital interactives that spark students' curiosity and help them make conceptual connections. Using the *Learn* books, students wonder, explore, and make sense of mathematics, which helps them develop a strong, positive mathematical identity.

Mathematical Practice Standards	Aligned Components of *Eureka Math²*
Standard 1 Problem Solve and Persevere	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
Standard 2 Abstract and Generalize	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
Standard 3 Justify and Prove	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
Standard 4 Model with Mathematics	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
Standard 5 Represent	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
Standard 6 Collaborate Mathematically	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
Standard 7 Culturally Connect	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson. *Supplemental material is necessary to address cultural contexts relating to Montana Indigenous Peoples and local communities.*

The Real Number System (REAL)

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.NUM.REAL.1 Use reasoning to establish properties of integer exponents, including scientific notation.	8 M1 Lesson 3: Time to Be More Precise—Scientific Notation 8 M1 Lesson 5: Products of Exponential Expressions with Whole-Number Exponents 8 M1 Lesson 6: More Properties of Exponents 8 M1 Lesson 7: Making Sense of the Exponent of 0 8 M1 Lesson 8: Making Sense of Integer Exponents 8 M1 Lesson 9: Writing Equivalent Expressions
MT.CORE.NUM.REAL.2 Represent and perform operations within very large and very small numbers using scientific notation.	8 M1 Lesson 4: Adding and Subtracting Numbers Written in Scientific Notation 8 M1 Lesson 10: Evaluating Numerical Expressions by Using Properties of Exponents 8 M1 Lesson 11: Small Positive Numbers in Scientific Notation 8 M1 Lesson 12: Operations with Numbers in Scientific Notation 8 M1 Lesson 13: Applications with Numbers in Scientific Notation 8 M1 Lesson 15: Get to the Point
MT.CORE.NUM.REAL.3 Define, manipulate, interpret, and compare real numbers presented through different representations, including both rational and irrational numbers, and apply comparisons in context. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities.	A1 M4 Lesson 13: Using Square Roots to Solve Quadratic Equations A1 M4 Lesson 17: Rewriting Square Roots A1 M5 Lesson 9: Unit Fraction Exponents A1 M5 Lesson 10: Rational Exponents *Supplemental material is necessary to address applying comparisons in context as well as cultural contexts relating to Montana Indigenous Peoples and local communities.*

Understand Functions and Expressions (FUN)

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.FUN.1 Interpret parts of an expression, such as terms, factors, and coefficients.	A1 M4 Lesson 3: Analyzing Functions That Model Projectile Motion A1 M4 Lesson 9: Creating and Solving Quadratic Equations in One Variable A1 M4 Lesson 23: Creating Equations of Quadratic Functions to Model Contexts A1 M4 Lesson 25: Maximizing Area *Supplemental material is necessary to fully address this standard.*
MT.CORE.ALG.FUN.2 Understand the definition of a function and distinguish between functions and relations.	A1 M3 Lesson 1: The Definition of a Function A1 M3 Lesson 2: Representing, Naming, and Evaluating Functions
MT.CORE.ALG.FUN.3 Represent functions using tables, graphs with appropriate scales and labels, equations, and verbal situations, while using technology strategically by: • Understanding that different representations highlight different aspects of functions, choosing the representation that is appropriate for the context, and • Comparing properties of two functions, including when each is represented in a different way.	A1 M2 Lesson 1: Solution Sets of Linear Equations in Two Variables A1 M2 Lesson 2: Graphing Linear Equations in Two Variables A1 M2 Lesson 3: Creating Linear Equations in Two Variables A1 M2 Lesson 6: Applications of Linear Equations and Inequalities A1 M3 Lesson 12: Comparing Functions A1 M4 Lesson 11: Graphing Quadratic Functions from Factored Form A1 M4 Lesson 12: Using Symmetry to Graph Quadratic Functions from Standard Form A1 M4 Lesson 21: Completing the Square to Graph Quadratic Functions A1 M4 Lesson 23: Creating Equations of Quadratic Functions to Model Contexts A1 M4 Lesson 25: Maximizing Area A1 M4 Lesson 26: Modeling Data with Quadratic Functions A1 M4 Lesson 27: Search and Rescue Helicopter

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.FUN.4 Use function notation, evaluate functions, and interpret statements that use function notation in context. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities.	A1 M3 Lesson 1: The Definition of a Function A1 M3 Lesson 2: Representing, Naming, and Evaluating Functions A1 M3 Lesson 6: Representations of Functions A1 M3 Lesson 17: Step Functions *Supplemental material is necessary to address cultural contexts relating to Montana Indigenous Peoples and local communities.*
MT.CORE.ALG.FUN.5 Identify the domain and range of a function, including considering the constraints imposed by context. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities.	A1 M3 Lesson 3: The Graph of a Function A1 M3 Lesson 14: Modeling Elevation as a Function of Time A1 M3 Lesson 17: Step Functions A1 M4 Lesson 2: Projectile Motion A1 M4 Lesson 3: Analyzing Functions That Model Projectile Motion A1 M4 Lesson 23: Creating Equations of Quadratic Functions to Model Contexts *Supplemental material is necessary to address cultural contexts relating to Montana Indigenous Peoples and local communities.*
MT.CORE.ALG.FUN.6 Understand that a graph of an equation in two variables is the set of all of its solutions plotted in a coordinate plane.	A1 M2 Lesson 1: Solution Sets of Linear Equations in Two Variables A1 M2 Lesson 2: Graphing Linear Equations in Two Variables

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.FUN.7 Understand that expressions can be rewritten in equivalent forms to make different characteristics or features visible.	A1 M1 Lesson 1: The Growing Pattern of Ducks A1 M1 Lesson 2: The Commutative, Associative, and Distributive Properties A1 M1 Lesson 3: Polynomial Expressions A1 M4 Lesson 3: Analyzing Functions That Model Projectile Motion A1 M4 Lesson 5: Solving Equations That Contain Factored Expressions A1 M4 Lesson 10: Zeros of Functions A1 M4 Lesson 11: Graphing Quadratic Functions from Factored Form A1 M4 Lesson 21: Completing the Square to Graph Quadratic Functions A1 M4 Lesson 22: A Summary of Graphing Quadratic Functions
MT.CORE.ALG.FUN.8 Rearrange literal equations to highlight quantities of interest.	A1 M1 Lesson 12: Rearranging Formulas A1 M4 Lesson 13: Using Square Roots to Solve Quadratic Equations

Linear Functions and Expressions (LIN)

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.LIN.1 Understand that linear functions have a constant rate of change.	8 M6 Lesson 6: Linear Functions and Rate of Change
MT.CORE.ALG.LIN.2 Understand slope as a rate of change and y-intercept as the initial value.	8 M6 Lesson 6: Linear Functions and Rate of Change 8 M6 Lesson 7: Interpreting Rate of Change and Initial Value
MT.CORE.ALG.LIN.3 Represent linear functions using tables, graphs, equations, and verbal situations, while using technology strategically. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities by: • Identifying the rate of change and initial value in each representation. • Converting between representations, and • Writing equations for a line perpendicular or parallel to a given line that passes through a given point.	8 M4 Lesson 21: Slope and Parallel Lines 8 M6 Lesson 7: Interpreting Rate of Change and Initial Value 8 M6 Lesson 8: Comparing Functions 8 M6 Lesson 9: Increasing and Decreasing Functions A1 M3 Lesson 4: The Graph of the Equation $y = f(x)$ A1 M3 Lesson 5: Using Pseudocode to Compare Graphs of Functions and Graphs of Equations A1 M3 Lesson 12: Comparing Functions *Supplemental material is necessary to address writing equations for a line perpendicular or parallel to a given line that passes through a given point and to address cultural contexts relating to Montana Indigenous Peoples and local communities.*

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.LIN.4 Understand that linear equations can be represented in multiple forms and the specific features of each form by: • Choosing the form strategically when writing an equation based on given information and intended use, • Converting between slope-intercept, point-slope, and standard form symbolically, • Understanding the relationship between slope-intercept form, the rate of change, and the initial value, • Understanding the relationship between point-slope form, the rate of change, and a given point, and • Understanding the relationship between standard form and the x- and y-intercepts.	8 M4 Lesson 20: Slope-Intercept Form of the Equation of a Line 8 M4 Lesson 22: Point-Slope Form of the Equation of a Line 8 M4 Lesson 23: Comparing Equations in Different Forms 8 M4 Lesson 24: The Patterns, the Pops, and the Pastries 8 M4 Lesson 25: Lines, Lines, and More Lines 8 M4 Lesson 26: Linear Equations from Word Problems 8 M4 Lesson 27: Get to Work 8 M6 Lesson 14: Determining an Equation of a Line Fit to Data
MT.CORE.ALG.LIN.5 Understand that a solution to a system of equations is a coordinate pair that makes both equations true.	8 M5 Lesson 2: Introduction to Systems of Linear Equations

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.LIN.6 Solve systems of linear equations by graphing, substitution, and elimination, including systems with zero, one, or infinite solutions, while using technology and representations strategically.	8 M5 Lesson 2: Introduction to Systems of Linear Equations 8 M5 Lesson 3: Identifying Solutions 8 M5 Lesson 4: More Than One Solution 8 M5 Lesson 6: Solving Systems of Linear Equations without Graphing 8 M5 Lesson 7: The Substitution Method 8 M5 Lesson 9: Rewriting Equations to Solve a System of Equations 8 M5 Lesson 10: Choosing a Solution Method A1 M2 Lesson 7: Low-Flow Showerhead A1 M2 Lesson 8: Systems of Linear Equations in Two Variables A1 M2 Lesson 9: A New Way to Solve Systems A1 M2 Lesson 10: The Elimination Method A1 M2 Lesson 11: Applications of Systems of Equations

Quadratic Functions and Expressions (QUAD)

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.QUAD.1 Understand that quadratic functions do not have a constant rate of change but have a constant second difference over equal intervals and identify the constant second difference in tables.	A1 M4 Lesson 26: Modeling Data with Quadratic Functions
MT.CORE.ALG.QUAD.2 Represent quadratic functions using tables, graphs, equations, and verbal situations, while using technology strategically. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities.	A1 M4 Lesson 1: Falling Objects A1 M4 Lesson 2: Projectile Motion A1 M4 Lesson 3: Analyzing Functions That Model Projectile Motion A1 M4 Lesson 4: Graphs of Quadratic Functions *Supplemental material is necessary to address cultural contexts relating to Montana Indigenous Peoples and local communities.*

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.QUAD.3 Understand that quadratic expressions can be represented in multiple forms and the specific features of each form by: • Choosing the form strategically when writing an expression based on given information and intended use, • Converting between factored, standard, and vertex forms symbolically and using representations, • Understanding the relationship between factored form and the zeros of the function, and • Understanding the relationship between vertex form and the vertex of the function.	A1 M4 Lesson 1: Falling Objects A1 M4 Lesson 2: Projectile Motion A1 M4 Lesson 3: Analyzing Functions That Model Projectile Motion A1 M4 Lesson 10: Zeros of Functions A1 M4 Lesson 11: Graphing Quadratic Functions from Factored Form A1 M4 Lesson 12: Using Symmetry to Graph Quadratic Functions from Standard Form A1 M4 Lesson 18: The Quadratic Formula and Zeros of a Function A1 M4 Lesson 19: Transforming the Graphs of Quadratic Functions A1 M4 Lesson 20: Art with Transformations A1 M4 Lesson 21: Completing the Square to Graph Quadratic Functions A1 M4 Lesson 22: A Summary of Graphing Quadratic Functions A1 M4 Lesson 23: Creating Equations of Quadratic Functions to Model Contexts
MT.CORE.ALG.QUAD.4 Solve quadratic equations by factoring, graphing, completing the square, using inverse operations, and the quadratic formula. Use technology and representations strategically.	A1 M4 Lesson 5: Solving Equations That Contain Factored Expressions A1 M4 Lesson 6: Solving Quadratic Equations by Factoring: Identities and Guess and Check A1 M4 Lesson 7: Solving Quadratic Equations by Factoring: Splitting the Linear Term A1 M4 Lesson 8: A Summary of Solving Quadratic Equations by Factoring A1 M4 Lesson 9: Creating and Solving Quadratic Equations in One Variable A1 M4 Lesson 13: Using Square Roots to Solve Quadratic Equations A1 M4 Lesson 14: Solving Quadratic Equations by Completing the Square A1 M4 Lesson 15: Deriving the Quadratic Formula A1 M4 Lesson 16: Solving Quadratic Equations A1 M4 Lesson 18: The Quadratic Formula and Zeros of a Function

Exponential Functions and Expressions (EXP)

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.EXP.1 Understand that exponential functions have a constant common ratio over equal intervals, and identify the common ratio in tables and equations.	A1 M5 Lesson 19: Analyzing Exponential Growth
MT.CORE.ALG.EXP.2 Understand a as the initial value and b as the growth/decay factor for an exponential function written in standard form, $y = a \cdot b^x$.	A1 M5 Lesson 16: Exponential Growth A1 M5 Lesson 17: Exponential Decay
MT.CORE.ALG.EXP.3 Understand the relationship between growth/decay factor and growth/decay rate.	A1 M5 Lesson 16: Exponential Growth A1 M5 Lesson 17: Exponential Decay

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.EXP.4 Represent exponential functions using tables, graphs, equations, and verbal situations; using technology strategically. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities.	A1 M5 Lesson 8: Exponential Functions A1 M5 Lesson 11: Graphing Exponential Functions A1 M5 Lesson 12: Using Transformations to Graph Exponential Functions (Bases Greater Than 1) A1 M5 Lesson 13: Using Transformations to Graph Exponential Functions (Bases Between 0 and 1) A1 M5 Lesson 14: Writing Equations for Exponential Functions from Tables or Graphs A1 M5 Lesson 18: Modeling Populations A1 M5 Lesson 21: World Population Prediction A1 M5 Lesson 22: A Closer Look at Populations A1 M5 Lesson 23: Modeling the Temperature of Objects Cooling Over Time A1 M5 Lesson 24: Modeling an Invasive Species Population *Supplemental material is necessary to address cultural contexts relating to Montana Indigenous Peoples and local communities.*
MT.CORE.ALG.EXP.5 Solve exponential equations graphically, while using technology strategically.	A1 M5 Lesson 15: Calculating Interest A1 M5 Lesson 16: Exponential Growth A1 M5 Lesson 17: Exponential Decay A1 M5 Lesson 18: Modeling Populations A1 M5 Lesson 21: World Population Prediction A1 M5 Lesson 22: A Closer Look at Populations A1 M5 Lesson 23: Modeling the Temperature of Objects Cooling Over Time A1 M5 Lesson 24: Modeling an Invasive Species Population

Modeling with Functions (MOD)

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.MOD.1 Model situations in context, with linear, quadratic, and exponential functions. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities by: • Determining if a set of data is best modeled by a linear function, quadratic function, exponential function, or none, and explaining why, and • Understanding that there are contexts where solutions may not lie on the curve.	A1 M4 Lesson 26: Modeling Data with Quadratic Functions A1 M4 Lesson 27: Search and Rescue Helicopter A1 M5 Lesson 21: World Population Prediction A1 M5 Lesson 22: A Closer Look at Populations A1 M5 Lesson 23: Modeling the Temperature of Objects Cooling Over Time A1 M5 Lesson 24: Modeling an Invasive Species Population A1 M6 Lesson 1: Analyzing Paint Splatters A1 M6 Lesson 2: Using Residual Plots to Select Models for Data *Supplemental material is necessary to address cultural contexts relating to Montana Indigenous Peoples and local communities.*
MT.CORE.ALG.MOD.2 Interpret the coefficients in a linear, quadratic, and exponential model in context. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities.	A1 M2 Lesson 16: Using Lines to Model Bivariate Quantitative Data A1 M2 Lesson 17: Modeling Relationships with a Line A1 M2 Lesson 21: Analyzing Bivariate Quantitative Data A1 M4 Lesson 3: Analyzing Functions That Model Projectile Motion A1 M5 Lesson 15: Calculating Interest A1 M5 Lesson 16: Exponential Growth A1 M5 Lesson 17: Exponential Decay A1 M5 Lesson 18: Modeling Populations A1 M5 Lesson 19: Analyzing Exponential Growth A1 M5 Lesson 21: World Population Prediction A1 M5 Lesson 22: A Closer Look at Populations

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.ALG.MOD.2 ***continued***	A1 M5 Lesson 23: Modeling the Temperature of Objects Cooling Over Time A1 M5 Lesson 24: Modeling an Invasive Species Population *Supplemental material is necessary to address cultural contexts relating to Montana Indigenous Peoples and local communities.*
MT.CORE.ALG.MOD.3 Choose and interpret measurement units in formulas, graphs, and data displays to understand problems and to guide problem-solving in modeling situations. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities.	A1 M4 Lesson 25: Maximizing Area A1 M6 Lesson 5: Solar System Models *Supplemental material is necessary to address cultural contexts relating to Montana Indigenous Peoples and local communities.*
MT.CORE.ALG.MOD.4 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities in modeling situations. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities.	A1 M1 Lesson 6: Polynomial Identities A1 M6 Lesson 5: Solar System Models *Supplemental material is necessary to address cultural contexts relating to Montana Indigenous Peoples and local communities.*

Visualizing, Summarizing, and Interpreting Data (INT)

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.DATA.INT.6 Analyze the relationship between two quantitative data distributions in context that have a linear association. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities by: • Using technology strategically, represent two quantitative data distributions on scatter plots, • Describing verbally how the variables are related, • Using technology to find the least-squares regression line (line of best) fit for two quantitative variables, • Understanding that the line of best fit minimizes the square of the residuals, and • Understanding correlation as a measure of linear association and using technology, compute the correlation coefficient of a linear relationship.	A1 M2 Lesson 15: Relationships Between Quantitative Variables A1 M2 Lesson 16: Using Lines to Model Bivariate Quantitative Data A1 M2 Lesson 17: Modeling Relationships with a Line A1 M2 Lesson 18: Calculating and Analyzing Residuals A1 M2 Lesson 19: Analyzing Residuals A1 M2 Lesson 20: Interpreting Correlation A1 M2 Lesson 21: Analyzing Bivariate Quantitative Data A1 M6 Lesson 1: Analyzing Paint Splatters A1 M6 Lesson 2: Using Residual Plots to Select Models for Data A1 M6 Lesson 3: Populations of US Cities *Supplemental material is necessary to address cultural contexts relating to Montana Indigenous Peoples and local communities.*

Probability (PROB)

Montana PK–12 Mathematics Content Standards	Aligned Components of *Eureka Math²*
MT.CORE.DATA.PROB.1 Understand the concept of a sample space and describe events as subsets of a sample space.	*Supplemental material is necessary to address this standard.*
MT.CORE.DATA.PROB.2 Understand the concepts of conditional probability and independence in context. This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities by: • Determining whether two events, A and B, are independent by using two-way tables, tree diagrams, and/or Venn diagrams, and interpreting the answer in context, and • Computing the conditional probability of event A given event B by using two-way tables, tree diagrams, and/or Venn diagrams, and interpreting the answer in context.	*Supplemental material is necessary to address this standard, including cultural contexts relating to Montana Indigenous Peoples and local communities.*