

Montana 9 Algebra I

FREE PREVIEW

Full-Year Teacher Planner, Blank Editable Planner & School-Submission Binder

This preview shows the real structure and a genuine sample of the completed planner. The full product contains 9 units, 36 weekly plans and 180 daily plans, plus blank editable versions of every form.

State	Montana
Grade	9 (High)
Subject	Algebra I
Course category	Mathematics
Standards family	Mathematics
Framework	Montana PK-12 Mathematics Content Standards (adopted 2025, implemented 2026)
Issuing agency	Montana Office of Public Instruction
Scope	36 instructional weeks · 180 instructional days · 9 units

This is a statewide standards index, not a local course catalog. Course names, grade placement, electives, and graduation sequences vary by district.

What you get

Folder	Contents
01 START HERE	Read-me, contents, printing and digital instructions, standards verification guide, this preview
02 FILLED FULL YEAR	Completed planner in colour and ink-friendly PDF, plus editable DOCX
03 BLANK EDITABLE	Blank planner in colour, ink-friendly and fillable PDF, plus editable DOCX
04 ASSESSMENTS AND DATA	Baseline observation, quarterly rubrics, anecdotal forms, portfolio checklist
05 SCHOOL SUBMISSION	Submission covers, alignment summary, evidence checklist, observation, reflection, signature page
06 LICENSE AND CREDITS	Terms of use, credits and licences, copyright notice

The pages that follow are reproduced **exactly** as they appear in the full completed planner.

Week 9 — From a Situation to an Equation

Unit 3: Creating Equations From Situations · Month 3 · Quarter 1 · Semester 1 · Instructional Days 41–45

Essential question	How do you turn a paragraph into an equation?
Standards	Creating Equations in One Variable -> MT.CORE.ALG.MOD.1 Core Algebraic and Functional Reasoning Standards / Modeling with Functions (MOD) — 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. MT.CORE.ALG.FUN.8 Core Algebraic and Functional Reasoning Standards / Understand Functions and Expressions (FUN) — Rearrange literal equations to highlight quantities of interest.
Learning target	"I can create an equation or inequality in one variable from a situation and solve it."
Local dates	_____ (enter your school dates)

Measurable objectives

- Students will create equations and inequalities in one variable and use them to solve problems in context, extending from linear contexts to quadratic, exponential and absolute value.

Success criteria (student-friendly)

- "I define the variable including its units."
- "I write an equation that says what the situation says."
- "I solve and interpret the answer in the situation."

Academic vocabulary

variable, define, constraint, inequality, context, interpret

Materials and technology

- Notebooks
- Printed contexts
- Chart paper
- Calculators as available

Differentiation and supports

Support area	This week's plan
Special education / IEP	Reduce group size; pair visual cue cards with all verbal directions; allow gesture or picture response in place of speech; pre-teach the week's target in a 1:1 warm-up.
Section 504	Provide the child's documented accommodations throughout; permit movement breaks and alternative seating at any point in the sequence.

Support area	This week's plan
Multilingual learners	Introduce each vocabulary word with an object or image; accept home-language responses; send the vocabulary list home where a translation is available; pair with a peer who shares the home language.
Advanced / extension	Ask the learner to teach the skill to a peer, extend the task, or record a demonstration for the class reference wall.
Intervention / reteach	Reteach the target in a short small group using the same materials; split the day's check for understanding into two smaller steps.
Enrichment	Extend into an open-ended centre or project connected to the essential question.

Assessment and evidence

Equations created from contexts, solved and interpreted.

Family communication

Ask your child what their variable stands for, exactly.

Day 41 — Defining the Variable Properly

Week 9, Day 1 · Unit 3 · Standards: MT.CORE.ALG.MOD.1, MT.CORE.ALG.FUN.8

Focus	The first step.
Learning target	"I can create an equation or inequality in one variable from a situation and solve it."
Vocabulary in use	variable, define, constraint, inequality, context, interpret
Local date	_____

Learning sequence

Connect: solving equations already given. Teach: defining a variable so that it names a QUANTITY with units and a reference point, not just a letter - and how a vague definition produces an unfixable equation. CONTEXTS ARE OBJECTS, PROCESSES AND PUBLISHED QUANTITIES; no context asks about a student's home, money or family. Try: shared definition for three situations. Apply: students define variables for four. Reflect: most wrong equations are wrong before any algebra happens.

Check for understanding

Student defines a variable with quantity and units.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Day 42 — Linear Situations

Week 9, Day 2 · Unit 3 · Standards: MT.CORE.ALG.MOD.1, MT.CORE.ALG.FUN.8

Focus	Creating linear equations.
Learning target	"I can create an equation or inequality in one variable from a situation and solve it."
Vocabulary in use	variable, define, constraint, inequality, context, interpret
Local date	_____

Learning sequence

Connect: definitions. Teach: translating a linear situation phrase by phrase, keeping the equation readable back into English. Try: shared translation of two. Apply: students create and solve three. Reflect: if you cannot read it back as a sentence, check it.

Check for understanding

Student creates and solves a linear equation from context.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Day 43 — Quadratic and Exponential Situations

Week 9, Day 3 · Unit 3 · Standards: MT.CORE.ALG.MOD.1, MT.CORE.ALG.FUN.8

Focus	Extending the range.
Learning target	"I can create an equation or inequality in one variable from a situation and solve it."
Vocabulary in use	variable, define, constraint, inequality, context, interpret
Local date	_____

Learning sequence

Connect: linear. Teach: contexts that are quadratic (area, projectile height as a supplied model) or exponential (repeated proportional change), and how the situation signals which. Try: shared work on two. Apply: students create and solve two. Reflect: the shape of the situation determines the shape of the equation.

Check for understanding

Student creates a quadratic or exponential equation from context.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Day 44 — Absolute Value Situations

Week 9, Day 4 · Unit 3 · Standards: MT.CORE.ALG.MOD.1, MT.CORE.ALG.FUN.8

Focus	Tolerance and distance.
Learning target	"I can create an equation or inequality in one variable from a situation and solve it."
Vocabulary in use	variable, define, constraint, inequality, context, interpret
Local date	_____

Learning sequence

Connect: last week. Teach: absolute value in context as tolerance or distance from a target, which is where it genuinely arises. Try: shared modelling of a tolerance situation. Apply: students create and solve two. Reflect: absolute value in a context nearly always means 'how far off'.

Check for understanding

Student models a tolerance situation with absolute value.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Day 45 — Inequalities and What They Allow

Week 9, Day 5 • Unit 3 • Standards: MT.CORE.ALG.MOD.1, MT.CORE.ALG.FUN.8

Focus	One-variable inequalities.
Learning target	"I can create an equation or inequality in one variable from a situation and solve it."
Vocabulary in use	variable, define, constraint, inequality, context, interpret
Local date	_____

Learning sequence

Connect: equations. Teach: creating inequalities where a situation gives a limit rather than an exact value, and interpreting the solution set as a RANGE of acceptable values. Try: shared work on two. Apply: students create, solve and interpret three. Reflect: most real constraints are inequalities, not equations.

Check for understanding

Student creates an inequality and interprets its solution set.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Important before you buy

- This is a **digital download**. Nothing is shipped.
- The planner is **calendar-neutral**: Month 1–9, Week 1–36, Day 1–180, so it fits any school calendar. You add your own dates.
- Standards were transcribed from the official source.
- Not affiliated with or endorsed by Montana Office of Public Instruction, any district, school, assessment provider or Teachers Pay Teachers.
- No approval, compliance, rating or evaluation outcome is guaranteed.

This is a statewide standards index, not a local course catalog. Course names, grade placement, electives, and graduation sequences vary by district.

Terms of Use, Privacy and Copyright

Licence

This resource is licensed for use by **one teacher in one classroom**. You may print and reproduce the pages for your own students. You may not share, sell, sub-licence, post publicly, or upload this file to any website, shared drive or district repository. Additional classroom licences are available at a reduced price.

Copyright

All text, forms and layouts in this resource are original work. Fonts used are the standard PDF base fonts, which carry no redistribution restriction. No competitor product, published curriculum, commercial assessment, answer key, book text, character, logo or agency branding is reproduced. Where standard codes and text appear, they are quoted from a public government document for identification and alignment purposes and remain the property of the issuing agency.

Student privacy

Record learners using **initials or a school-approved identifier only**. Do not record IEP content, Section 504 plans, protected assessment scores, medical information or family information in this planner. Store completed pages securely and follow your programme's privacy requirements and applicable law. **This planner is not a secure student-information system and is not a substitute for official records.**

Accessibility

Pages use a minimum 8-point type size, high-contrast text, wide writing areas, print-safe margins, numbered pages and a bookmarked navigation outline. Colour and ink-friendly versions are supplied, and no information is conveyed by colour alone.

Disclaimer

This independently created resource is not affiliated with, sponsored by, approved by, or endorsed by Montana Office of Public Instruction, any local school district, any school, any assessment provider, or Teachers Pay Teachers. Standards, assessments, course requirements, and submission procedures may change. Teachers must verify current requirements using https://opifiles.mt.gov/Portals/182/Page%20Files/K-12%20Content%20Standards%20%26%20Revision/Math/PK-12%20Montana%20Math%20Standards_PUBLIC.pdf and local school or district guidance.

Source citation

Montana Office of Public Instruction. Montana PK-12 Mathematics Content Standards (adopted 2025, implemented 2026). Codes and statements are transcribed from the MONTANA PK-12 MATHEMATICS CONTENT STANDARDS, whose own cover reads "MONTANA OFFICE OF PUBLIC INSTRUCTION (OPI) ADOPTED 2025 IMPLEMENTED 2026". THIS IS A RECENT CHANGE OF EDITION AND IT MATTERS: OPI's mathematics standards page records the previous 2011 Montana mathematics standards as effective UNTIL JUNE 2026 and this edition as effective FROM JULY 2026, so this is the framework in force for the 2026-27 school year and the 2011 codes are superseded. Codes take the form MT.GRADE.DOMAIN.NUMBER -- the document explains its own scheme, with kindergarten indicated by "K", grades 1-8 by their number and high school by "HS" -- and domains are abbreviated, among them CC counting and cardinality, OA operations and algebraic thinking, NBT number and operations in base ten, MD measurement and data and G geometry. MANY STANDARDS CARRY MONTANA INDIAN EDUCATION FOR ALL CONTENT INSIDE THE STANDARD ITSELF, in the recurring form "This standard should incorporate cultural context relating to Montana Indigenous Peoples and local communities". That sentence is part of the standard as printed and is transcribed with it; trimming it to the national Common Core wording would misrepresent what Montana adopted. THIS STATE PUBLISHES NO ALGEBRA I COURSE, AND NO HIGH SCHOOL MATHEMATICS COURSES AT ALL. Its standards, adopted in 2025 and implemented in 2026, are written as CORE and CORE PLUS across four conceptual categories -- numeric reasoning, algebraic and functional reasoning, data reasoning and probability, and geometric reasoning -- eighty-one standards, none of them assigned to a grade or to a course name. A course called Algebra I is a district's arrangement of them, so THERE IS NO ACCELERATION ROUTE TO CHECK and no companion course the state expects alongside this one. THIS ROW REGISTERS FORTY-SEVEN STANDARDS. It covers the whole of Core algebraic and functional reasoning and the whole of Core probability, part of Core data reasoning, and NONE OF CORE GEOMETRIC

REASONING, which this state files as its own conceptual category and which the geometry course carries. THE PRACTICE STANDARDS ARE THIS STATE'S OWN SEVEN, NOT THE FAMILIAR EIGHT: it has no separate practice for structure or for repeated reasoning -- both sit inside MP.2 Abstract and Generalize -- and it has two the eight do not, MP.6 Collaborate Mathematically and MP.7 CULTURALLY CONNECT, which asks pupils to appreciate the role of mathematics in cultural contexts including those of tribally specific Montana Indigenous Peoples. MP.7 is registered against the weeks whose content standards themselves carry the cultural-context requirement, which is where it is genuinely taught. Retrieved 2026-07-27 from https://opifiles.mt.gov/Portals/182/Page%20Files/K-12%20Content%20Standards%20%26%20Revision/Math/PK-12%20Montana%20Math%20Standards_PUBLIC.pdf