
Montana 10 Geometry

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	10 (High)
Subject	Geometry
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 — Earning the Congruence Criteria

Unit 3: Verifying Congruence and Similarity · Month 3 · Quarter 1 · Semester 1 · Instructional Days 41–45

Essential question	Why is SAS enough, and why is SSA not?
Standards	Verifying Triangle Congruence Criteria -> MT.CORE.GEOM.TRANS.2 Core Geometric Reasoning Standards / Transformations (TRANS) — Define the congruence of two and show that two figures are congruent by finding a sequence of rigid motions that maps one figure to the other by: Using the definition of congruence in terms of rigid motions to show that two triangles are congruent if, and only if, corresponding pairs of sides and corresponding pairs of angles are congruent, and Verifying that two triangles are congruent if, but not only if, the following groups of corresponding parts are congruent: angle-side- angle (ASA), side-angle-side (SAS), and side-side-side (SSS).
Learning target	"I can verify the triangle congruence criteria using rigid motions."
Local dates	_____ (enter your school dates)

Measurable objectives

- Students will verify criteria for showing triangles are congruent using a sequence of rigid motions that map one triangle to another, including that two triangles are congruent if and only if corresponding pairs of sides and angles are congruent, and the ASA, SAS, SSS and AAS groups.

Success criteria (student-friendly)

- "I state the 'if and only if' criterion in full."
- "I verify ASA, SAS, SSS and AAS by rigid motions."
- "I explain why a non-criterion fails."

Academic vocabulary

corresponding parts, ASA, SAS, SSS, AAS, criterion, if and only if, counter-example

Materials and technology

- Tracing paper
- Rulers
- Protractors
- Compasses
- Graph paper

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

Criteria verified by rigid motions and a non-criterion refuted.

Family communication

Ask your child why three sides fix a triangle completely.

Day 41 — All Six Parts

Week 9, Day 1 · Unit 3 · Standards: MT.CORE.GEOM.TRANS.2

Focus	The full criterion.
Learning target	"I can verify the triangle congruence criteria using rigid motions."
Vocabulary in use	corresponding parts, ASA, SAS, SSS, AAS, criterion, if and only if, counter-example
Local date	_____

Learning sequence

Connect: congruence. Teach: the standard's 'if and only if' statement - two triangles are congruent exactly when all three pairs of sides and all three pairs of angles are congruent - and why both directions matter. Try: shared verification in both directions. Apply: students state and illustrate both directions. Reflect: 'if and only if' is two claims, and both need checking.

Check for understanding

Student states and illustrates both directions of the criterion.

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 — Why You Do Not Need All Six

Week 9, Day 2 · Unit 3 · Standards: MT.CORE.GEOM.TRANS.2

Focus	Toward the criteria.
Learning target	"I can verify the triangle congruence criteria using rigid motions."
Vocabulary in use	corresponding parts, ASA, SAS, SSS, AAS, criterion, if and only if, counter-example
Local date	_____

Learning sequence

Connect: six parts. Teach: the question the criteria answer - how few parts force the rest - explored by constructing triangles from partial information and seeing when the result is forced. Try: shared construction from two sides. Apply: students construct from three different partial sets and record which were forced. Reflect: you have just discovered which criteria can work.

Check for understanding

Student identifies which partial information forces a unique triangle.

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 — Verifying SAS and ASA

Week 9, Day 3 · Unit 3 · Standards: MT.CORE.GEOM.TRANS.2

Focus	Two criteria.
Learning target	"I can verify the triangle congruence criteria using rigid motions."
Vocabulary in use	corresponding parts, ASA, SAS, SSS, AAS, criterion, if and only if, counter-example
Local date	_____

Learning sequence

Connect: forcing. Teach: verifying SAS and ASA by constructing the sequence of rigid motions that maps one triangle onto the other, which is what the standard asks. Try: shared verification of SAS. Apply: students verify ASA by exhibiting a sequence. Reflect: the criterion is now a theorem you proved, not a rule you accepted.

Check for understanding

Student verifies a congruence criterion with a sequence of rigid motions.

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 — Verifying SSS and AAS

Week 9, Day 4 · Unit 3 · Standards: MT.CORE.GEOM.TRANS.2

Focus	Two more.
Learning target	"I can verify the triangle congruence criteria using rigid motions."
Vocabulary in use	corresponding parts, ASA, SAS, SSS, AAS, criterion, if and only if, counter-example
Local date	_____

Learning sequence

Connect: SAS and ASA. Teach: verifying SSS and AAS the same way, with AAS reduced to ASA by the angle sum. Try: shared verification of SSS. Apply: students verify AAS. Reflect: AAS is not a new fact; it is ASA wearing a hat.

Check for understanding

Student verifies SSS or AAS by rigid motions.

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 — The Ones That Fail

Week 9, Day 5 · Unit 3 · Standards: MT.CORE.GEOM.TRANS.2

Focus	Counter-examples.
Learning target	"I can verify the triangle congruence criteria using rigid motions."
Vocabulary in use	corresponding parts, ASA, SAS, SSS, AAS, criterion, if and only if, counter-example
Local date	_____

Learning sequence

Connect: four criteria. Teach: why AAA and SSA do not force congruence, shown by CONSTRUCTING two non-congruent triangles satisfying each - the standard's 'if but not only if' phrasing pointing straight at this. Try: shared construction of an SSA counter-example. Apply: students construct one counter-example and explain. Reflect: a counter-example settles the question completely and permanently.

Check for understanding

Student constructs a counter-example to a false criterion.

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 GEOMETRY COURSE, AND NO HIGH SCHOOL MATHEMATICS COURSES AT ALL. Its 2026 standards are CORE and CORE PLUS across four conceptual categories and none of the eighty-one is assigned to a grade or a course name, so a course called Geometry is a district's arrangement of them. THIS ROW REGISTERS THIRTY-THREE STANDARDS and covers ALL EIGHT of Core geometric reasoning together with the six data-reasoning standards the Algebra I planner in this series leaves to it, so the two rows between them cover the whole of Core except scientific notation and one statistical-question standard. TWO WEEKS CITE ALGEBRA STANDARDS AND THAT IS DELIBERATE: this state files the slope criteria for parallel and perpendicular lines under MT.CORE.ALG.LIN.3 and rearranging

a formula under MT.CORE.ALG.FUN.8, so citing a geometry code for those weeks would have cited a standard that does not say what the week teaches. THE PRACTICE STANDARDS ARE THIS STATE'S OWN SEVEN, not the familiar eight -- structure and repeated reasoning both sit inside MP.2 Abstract and Generalize, and MP.6 Collaborate Mathematically and MP.7 Culturally Connect have no counterpart among the eight. THE STATE WRITES THIS SUBJECT AS ONE BAND FOR GRADES 9-12 and assigns no standard to a grade, so this grade 10 planner cites the same standards as the grade 9 planner in this series. WHAT DIFFERS IS THE YEAR'S WORK, NOT THE STANDARDS THE SCHOOL IS HELD TO. If you already own the grade 9 product in this subject, the standards page will look familiar; buy this one for the grade 10 listing, not for a different standard set. 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