

Math 8 (Pre-Algebra)

CR Anderson Middle School

Bryana Curry
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Required Materials & Textbooks

This year we are piloting Carnegie Learning. Students will be using a workbook in class and can also access their workbook and other resources through their Clever login. Students are also expected to bring a notebook designated for math notes and a pencil to class each day. Students may also choose to supply their own dry erase marker, colored correcting pen, and colored pencils or choose to share class supplies.

Course Description and Standards

This course advances mathematical proficiency and deepens cultural understanding, aligning with Montana's dual commitment to academic standards and Indian Education for All.

Standards for Mathematical Practice prompt students to:

- Make sense of and persevere in problem-solving.
- Reason abstractly and quantitatively.
- Construct and critique mathematical arguments.
- Model with mathematics in real-world settings.
- Use tools strategically (e.g., graphs, technology)
- Communicate precisely, look for structure, and notice regularity in patterns.

Indian Education for All (IEFA)

Under Montana's Constitution (Article X § 1(2)) and the law MCA 20-1-501, IEFA mandates that all students engage with the distinct cultural heritage of American Indians, and that educators incorporate these perspectives across Montana's Essential Understandings guide this integration: recognizing tribal sovereignty, cultural diversity, oral traditions, and Indigenous worldviews.

In Math 8, we incorporate rich and engaging lessons for culturally grounded math experiences. Examples of IEFA activities:

- Geometric Transformations through Montana American Indian Tribal Seals
- Beading Patterns Using Reflections
- Surface Area & Volume of Traditional Homes

These activities allow students to:

Explore **reflection, rotation, and symmetry** within Indigenous artistic themes.

Calculate **surface areas and volumes** of culturally significant structures like tipis or longhouses.

Engage meaningfully with **tribal geometry**, blending spatial reasoning with cultural artistry.

Learning Goals & Objectives

By the end of 8th Grade Math, students will be able to apply standards for mathematical practice under the four major domains:

- **Expressions & Equations**
 - Solve linear equations and systems of equations by manipulating expressions.
- **Functions**
 - Explore, graph, and interpret functions – identifying relationships between variables in these functions.
- **Geometry**
 - Analyze two and three-dimensional figures; explore congruence, similarity, and various transformations (reflections, transversals, rotations, dilations).
- **Statistics & Probability**
 - Represent data with scatterplots, box plots, dot plots; model associations and variability, use the data to make data-based observations and conclusions.

Grading Policy

Students will be graded on assessments (quizzes and tests) as well as independent work (worksheets, homework, and class activities). Most homework assignments will be graded on participation (attempting each problem and showing their work) rather than if they answered the problems correctly. Students are not expected to have mastered a concept after one lesson, they will need continued practice before they are able to demonstrate mastery. Assessments will be graded on what they answered correctly. Students can conference with the teacher to determine a plan for assessment retakes and corrections. In PowerSchool, grades will be weighted as 30% independent work and 70% assessments.

Grading Scale

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = Below 60

30% Independent Work	70% Assessments
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Classroom Expectations, Communication and Parent Engagement

Students are expected to stay up to date with what is being covered in class. When students are absent, they should check the agenda posted in the classroom and/or online found on my teacher page as well as check in with the teacher to determine make-up work.

Ms. Curry's Teacher Page: https://staff.helenaschools.org/staff_page/bcurry/

Students and Parents can contact me via email at bcurry@helenaschools.org

Please reach out if you have any questions, I want to work with you to help each student be successful. I am very excited to have your student in class. I strive to make math fun and a class where students want to learn!

Please fill out this page and return it to Ms. Curry by Friday September 4th. Please keep the previous syllabus pages for your reference.

Statement	Student Initials	Parent/ Guardian Initials
I understand students will be expected to come to class prepared with their math notebook and a pencil each day		
I understand students are expected to complete homework when assigned. Putting forth their best effort and showing their work		
I understand that most homework will be graded on participation rather than shown mastery to encourage continued practice		
I understand that Assessments will be weighted as 70% of students grades and Independent Work will be weighted as 30%. When looking at PowerSchool this means that total points are not used to calculate a student's grade		
I understand that students are expected to check the daily agenda and with the teacher to determine make-up work for absences		
I understand students can conference with the teacher to determine a plan for assessment retakes or corrections		

Student Printed Name: _____

Student Signature: _____

Parent/Guardian Printed Name: _____

Parent/Guardian Signature: _____