GRIMSHAW PUBLIC SCHOOL
"Inspiring Our Students Today For Tomorrow's Future"

Math 8 Course Outline
2024-2025
Teacher: Ms. Sinclair

I. Key Message/Expectations

Welcome! I am pleased to be your teacher and hope you enjoy learning about math as the year progresses. I am here to help you but it is my expectation that you come to class prepared and with a positive attitude and intention to learn. I believe that every student can excel in mathematics. It is very important that you are using class time effectively and practicing each topic. Be sure to ask questions to clarify concepts. Every student has the right and ability to learn. Therefore, an effective classroom is a positive learning environment where all students and teachers are treated with respect.

Attendance is one of the most important factors for academic success! It is expected that you come to class every day on time with the materials you require for class. If an absence is pre-planned please inform your teacher as early as possible so that materials can be provided. If unplanned, please inform the teacher either by email (sinclairm@prsd.ab.ca) or when back in school.

II. Course Overview

The goal of the study of mathematics is for students to:

- Use mathematics confidently to solve problems
- Communicate and reason mathematically
- Appreciate and value mathematics
- Make connections between mathematics and its applications
- Commit themselves to lifelong learning
- Become mathematically literate adults, using mathematics to contribute to society.

As per the Alberta Grade Eight Mathematics Program of Studies, the following learning outcomes will be covered in this course:

Number
- Demonstrate an understanding of squares, square roots, percents, ratio and rate
- Demonstrate an understanding of multiplying and dividing fractions and integers

Patterns and Relations
- Use patterns to describe the world and to solve problems
- Represent algebraic expressions in multiple ways

Shape and Space
- Use direct and indirect measurement to solve problems
- Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them
- Describe and analyze position and motion of objects and shapes

Statistics and Probability
- Collect, display and analyze data to solve problems
- Use experimental or theoretical probabilities to represent and solve problems involving uncertainty

III. Scope and Sequence

Course Work: Unit Exams 70%, Quizzes and Assignments 30%

Final Evaluation: Course Work 75%, Final Exam 25%

*Please note this is an approximate timeline. Unit order and timeframe **may change** as needed*

Concept	Outcome(s)	Approx. Start Dates:
Integers	Number	September
Percents, Ratios, and Rate	Number	October
Fractions	Number	November
Square Numbers	Number	December
Pythagorean Theorem	Shape and Space	December
Linear Relationships	Patterns and Relations	January
3D Objects	Shape and Space	February
Surface Area	Shape and Space	March
Volume	Shape and Space	April
Statistics and Probability	Statistics and Probability	May
Review and Final Exam		(Final Exam Date TBA)

Final Course Evaluation	
Number	32%
Patterns and Relations	9%
Shape and Space	26%
Statistics and Probability	8%
Final Exam	25%

IV. Teaching Methodology & Assessment

Students will be taught through a variety of different instructional methods and strategies including, but not limited to: direct teaching, cooperative learning, project-based learning, inquiry-based assignments, and technological means. These assignments are required to practice and develop the skills needed in each chapter and gain a deeper understanding of the course material.

Students should expect to be assessed for marks through the use of summative unit tests. Opportunities for rewrites will be available. In the event a student does not hand-in an assignment, a NHI (not handed in) will be assigned on PowerSchool until it is and parents/guardians will be notified. Students and parents are encouraged to use the school website and PowerSchool to keep informed of marks, attendance, etc. This site will be updated regularly to give an accurate representation of each student's achievement to date.

V. Materials

- Pencils/Erasers
- Ruler
- Binder/Lined Paper
- Calculator (not phone)