

# COURSE OUTLINE

## **Mathematics 8**

2022-2023

Mrs. Sydne Osadczuk

### **Contact Information:**

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Period 1 Google Classroom Code: wkf2i2r

Period 2 Google Classroom Code: syqfmwc

### Course Description:

The main goals of mathematics education are to prepare 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

Education in Alberta aims to honor cultural diversity and promote intercultural understanding. Students are able to build on foundational knowledge about First Nations, Metis, and Inuit peoples. The program of studies provides opportunities for students to develop a knowledge and understanding of, and respect for, the histories, cultures, languages, contributions, perspectives, experiences, and contemporary contexts of First Nations, Metis and Inuit.

### **Course Curriculum Outcomes:**

Students will meet a number of course objects in Mathematics Eight through a variety of Mathematical processes such as communication, connections, mental mathematics and estimations, problem-solving, reasoning, technology and visualization. The following are the general outcomes students are expected to meet:

**Number:** Develop number sense.

#### **Patterns and Relations:**

*Patterns* Use patterns to describe the world and to solve problems.

*Variables and Equations* Represent algebraic expressions in multiple ways

## Shape and Space:

*Measurement* Use direct and indirect measurement to solve problems.

*3-D Objects and 2-D Shapes* Describe the characteristics of 3-D objects and 2-D shapes and analyze the relationship among them.

*Transformations* Describe and analyze the position and motion of objects and shapes

## Statistics and Probability:

*Data Analysis* Collect, display and analyze data to solve problems.

*Chance and Uncertainty* Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.

## Course Topics/ Units:

Unit of Study	Timeline
Square Roots & Pythagorean Theorem	4 weeks
Integers	4 weeks
Operations with Fractions	4 - 5 weeks
Ratios & Rate	4 weeks
Percent	4 weeks
Geometry	4 weeks
Measuring Prisms & Cylinders	3 weeks
Linear Equations & Graphing	4 weeks
Data Analysis & Probability	2 weeks

*\*The time frame is a tentative outline. The time frame of units may shift slightly throughout the year.\**

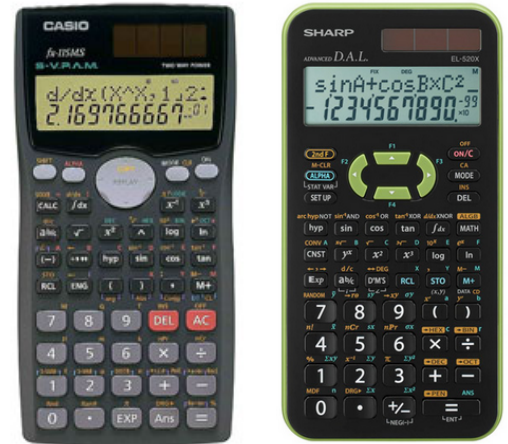
## Resources/ Textbooks/ Supplies:

The text we will be using is: **MATH LINKS 8**. Throughout the school year, students may be asked to bring in materials for various projects.

The main supplies required are:

- A binder
- Geometry set (including a protractor, ruler, compass)
- Loose leaf paper including lined and graph paper

- Pencils
- An eraser
- Pencil Crayons
- Scientific calculator \*\*\* Do not spend more than \$20. They should look something like this:
  - S-VPAM or DAL (allows symbols and numbers of an equation to be entered as they are written)
  - 2-line display (so you can see keystrokes & answers)
  - $\sqrt{\quad}$  radical button (square roots)
  - **a b/c** button (fractions)
  - Cursor key for scrolling (arrows)



### Course Evaluation and Student Assessment:

**Assessment for Learning (Formative Assessment)** is a systematic process of collecting information or evidence about student learning and is not assigned a grade/mark for the report card.

**Assessment of Learning (Summative Assessment)** is the judgment we make about the assessments of student learning based on established criteria and a mark/grade is recorded for the report card.

The purpose of assessment is to improve student learning. This means that judgments of student performance must be criterion-referenced so that descriptive feedback can be given that includes clearly expressed next steps for improvement. Tools of varying complexity are used by the teacher to facilitate this. For the more complex evaluations, the criteria are incorporated into a rubric where levels of performance for each criterion are stated in language that can be understood by students. Where possible, students will be engaged in their own assessment through self-reflection and the construction of rubrics.

Assessment is embedded within the instructional process throughout each unit rather than being an isolated event at the end. Often, the learning and assessment tasks are the same, with formative assessment provided throughout the unit. In every case, the desired demonstration of learning is articulated clearly and the learning activity is planned to make that demonstration possible. This process of beginning with the end in mind helps to keep focus on the expectations

of the course curriculum outcomes. The evaluations are expressed as a percentage/mark/grade based upon levels of achievement.

**Formative** = practice that is gained while learning 0%

**Summative** = evidence used to assess understanding 100%

Final Exam	Final assessment of Math 8 outcomes.	20%
Assignments	Assignments include hand-in assignments, textbook work, projects and performance assessments. Assignments may cover one or many topics/outcomes depending on the size of the assignment.	45%
Unit Tests	There will be 9 unit tests. These tests will cover <b>ALL</b> the outcomes of each unit. Students will be given a minimum 3 days' notice before a test.	25%
Quizzes	Quizzes are designed to check student understanding of current topics. These check in's will cover small topics and will occur on a frequent basis, therefore students are encouraged to have a nightly study routine.	10%
Formative	There will be a variety of formative assessments given throughout the semester. These activities provide teachers and students with valuable tracking information about academic progress and where to focus their efforts for improvement.	0%

**It is strongly recommended that students and parents/ guardians regularly check student progress on powerschool, addressing any questions or concerns as soon as they arise.**

**The Final Mark/Grade:**

The evaluation for this course is based on the student's achievement of curriculum expectations and the demonstrated skills required for effective learning. The final mark/grade represents the quality of the student's overall achievement of the expectations for the course and reflects the corresponding level of achievement.

**Appeals Process**

Should a situation arise where a student is not satisfied with an assessment outcome, first discuss the matter with the teacher outside of class time. If the teacher and the student are unable to resolve the issue, then the teacher will approach another teacher to assess the assignment. (The teacher will not have prior knowledge of the student's name or the previous grade for the given

assignment). If there is still an issue, a meeting will be set up between the student, teacher, parents, and administration to resolve the matter. The commencement of an appeal must occur in a timely manner; within 48 hours of receiving the marked assignment. In return, the appeal process will be completed as soon as possible.

Please see student agenda for more detailed appeals information.

### **Rewrite Policy:**

Rewrites will only be allowed on unit tests and large unit assessments/projects. In order to receive a rewrite the following criteria must be met:

- All assignments from the unit of study must be completed and handed in
- The study guide must be completed (where applicable)
- The rewrite must occur within one week of the original exam unless otherwise discussed with Mrs. Osadczuk.

Rewrites will occur before school, at lunch or after school, not during class time so as to not disturb further learning. The highest of the two grades will be recorded for reporting.

### **Classroom Expectations:**

#### **a. Respect:**

- i. Respect teachers and peers - it is essential to create a positive learning environment where everyone can feel safe and have an opportunity to learn. This includes listening when others are speaking, remaining on task during class time, and avoiding distractions such as technology.
- ii. Respect the environment- ensure the environment in which we learn is clean by picking up after yourself

#### **b. Responsibility:**

- i. Work ethic and homework completion - to ensure success in any course students are expected to try their best and complete all assigned tasks
- ii. Missed days - students are responsible for catching up on missed work/ assignments, tests and quizzes will be written the day students return.
- iii. Communication - You may contact your teacher to discuss how you are doing in the course, concerns should be addressed before big problems arise/ report cards

#### **c. Readiness:**

- i. Students must come to class prepared with all required material and a ready to learn attitude
- ii. Students must prepare for assessments and regular homework checks
- iii. Due dates: reasonable due dates will be set and it is expected they be followed, it is understood that situations arise where exceptions can be made as long as students make arrangements in advance. Late work submitted without a prior conversation with

the teacher will only be accepted with a late work slip containing a parent/guardian's signature.

**Late Policy:**

Students must be on time for class. Students that miss 25% of class will be marked absent. (10 minutes for a 45 minute class)

**Bus Days:**

Grades Sevens and Eights will be required to check their google classroom for assignments posted on bus days.