



MATH 30-1 Course Outline 2025-26

Eagle Butte High School

Google Classroom: t7gqvuk

tenellebrost@prrd8.ca

587-914-2995

403-528-1996 ext 2008

The Math 30-1 course is an advanced course designed for students with an interest and aptitude in mathematics. The focus will be on the theoretical development of mathematical topics. Mathematical experiences will emphasize a more dynamic view of mathematics as a precise language, used to reason, interpret, and explore.



Students will encounter problems that:

- develop critical and creative thinking skills
- require investigation, interpretation, reasoning, and analysis of mathematics to make a decision
- enable the acquisition of mathematical knowledge beyond the school realm
- build confidence in their mathematical abilities and problem-solving skills
- enhance communication of mathematical ideas more effectively
- link mathematics to other subject disciplines

COURSE CONTENT:

Functions & Relations

- ❖ operations and composition of functions, polynomial functions, radical functions, rational functions, exponential functions, logarithmic functions, exponential and logarithmic equations, problems with functions

Transformations

- ❖ algebraic and graphing representations of vertical/horizontal stretches, horizontal/vertical translations, reciprocal transformations, inverse transformations, radical transformations, combinations of transformations

Trigonometric Functions

- ❖ degree and radian measure, trig identities, graphing trig functions, solving trig equations and problems

Permutations & Combinations

- ❖ Fundamental Counting Principle, permutations & combinations, problem solving, Pascal's Triangle, Binomial Theorem

REQUIRED MATERIALS:

- Binder with dividers
- Notebook (50-100 pages)
- Graphing Calculator (TI-83 Plus or TI-84 Plus)
- Pencils, Pens, Erasers & Ruler
- Textbook – Pre-Calculus 12 (McGraw-Hill)

TENTATIVE STRUCTURE:

of classes

Course Outline & Classroom Procedures	1
UNIT 1: Transformations	8
UNIT 2: Polynomials	9
UNIT 3: Exponents & Logarithms	10
Units 1-3 Review & Cumulative Exam #1	3
UNIT 4: Trigonometry	17
UNIT 5: Radical/Rational Functions & Function Operations	13
Units 1-5 Review & Cumulative Exam #2	3
UNIT 6: Permutations, Combinations & The Binomial Theorem	8
Final Review	5
Diploma Exam	Friday, June 12, 2026

EVALUATION:

The Math 30-1 Diploma Exam will comprise 30% of your final mark for this course. The remaining 70% represents the school/teacher awarded mark, which will be calculated as follows:

FINAL MARK:

Course Grade **70%**

Diploma Exam **30%**

SCHOOL MARK:

Unit Exams **35%**

Summative Assignments **30%**
(In-Class Assignments/Quizzes)

Cumulative Exams **35%**
Exam #1= 15%, Exam #2 = 20%

Students are expected to take responsibility for their progress and achievement. If there is a concern or you feel an error has been made, please discuss it with me!

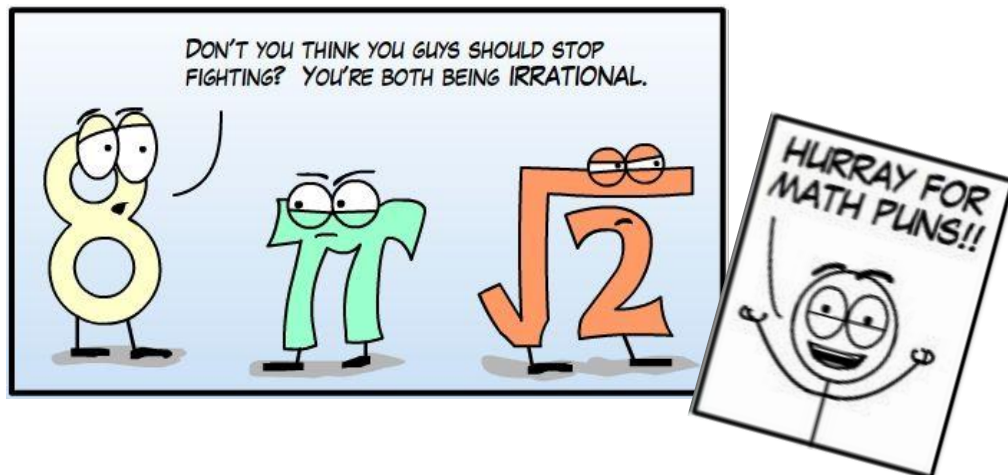
It is **my goal** for you to experience success in math. I am here to help you every step of the way. **You** must first want yourself to be successful and believe that you can reach your goal. The following 4 strategies will help yourself achieve your goal:

- Be an active listener and stay engaged during class
- Complete your work during class time
- Ask questions as you work in class when you don't understand a concept
- Do the assigned work on a daily basis

**AT THE END OF THE DAY
WHO YOU ARE IS TOTALLY
& COMPLETELY UP TO YOU**

Classroom Expectations

- Respect yourself, classmates, and school staff.
- Be in class and be on time for class.
- Be prepared to listen, learn & participate.
- Be prepared for class.
 - Be ready to work before the bell rings. Bring all your supplies that you will need (binder/notebook, pencil, eraser, calculator, water bottle).
- All electronic devices (cell phones, Chromebooks, earbuds, headphones, etc.) are only to be used with Mrs. Brost's permission.
- Healthy food and drinks are permitted in the classroom.
- Students are not permitted to leave class without teacher permission.



CLASSROOM PROCEDURES

Quick Quiz/Checkups

Almost every day will begin with a quick quiz or a checkup. The intention of this is to help you recall previous concepts and improve your understanding.

Entering the Classroom

Enter the room quickly and quietly. Begin working on your Quick Quiz **or** ask Mrs. Brost a quick question **or** wait in your desk patiently for me to begin the lesson. If you finish the Quick Quiz before everyone else...

- check over work from previous day
- do extra questions
- ask Mrs. Brost questions about homework
- or, wait quietly for further instructions

Arriving Late

A student who is not in the classroom when the second bell rings is considered late. Late students are not to disrupt the class. Enter the room quickly and quietly and find your seat. Too many lates = detention at lunch...& a late contract...

End of class

Class is over when the bell rings. Please do not pack up or leave class until the bell rings to signal class is over. Use your class time wisely...more time spent working during class = more concepts learned = less/no homework in the evenings.

Detentions

Inappropriate behaviour will not be tolerated. Please refer to your agenda. Detentions will be served at lunch time for inappropriate behaviour. If you skip your detention, you will not be allowed in class until you serve it.

Using the Washroom

The washroom may be used in emergencies. Please try to go before class. If you must use the washroom during class time, please ask at an appropriate time. You are not to go elsewhere (ie. other classrooms, hanging out in the hallway, the office...). If you are found somewhere else during your washroom break, you will lose the privilege of using the washroom during class.

Hand In Basket

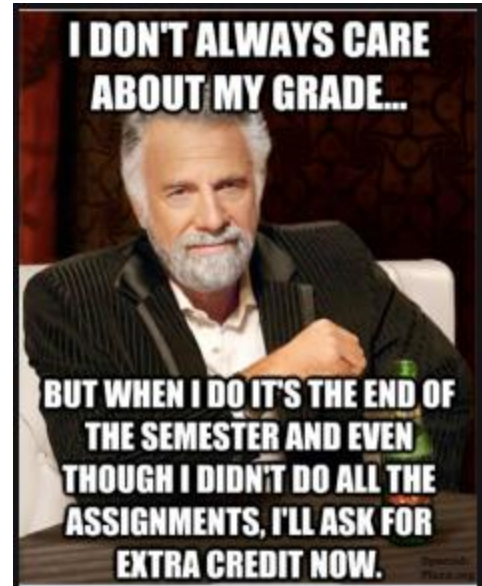
Place any bellwork, quizzes, and tests in the black basket on side of my desk.

Class Baskets

Each class has their own basket on the bookshelf near the door. If you were absent and there was a handout that day, this is where you will find the extra copies.

Extra Help

I expect you to use your class time wisely – be an active listener, ask questions, take notes, and work on assigned questions during class time. With 75-minute classes, that is a lot of time to work on math. The best time to get help is daily, as you are working on questions in class. Do not wait until the last minute to ask for help! For example, coming in the day before or day of a test and needing help on the entire unit is setting yourself up for failure. TAG is a perfect opportunity to get the help you need. If TAG isn't enough time, talk to me about getting help during lunch as well.



Absences

When possible, let me know ahead of time that you are going to be absent. It is the student's responsibility to catch up on any missed work. If you are absent for a quiz/exam, you will write it **the day following your absence** during TAG, lunch, or after school. Please talk to me to arrange a time.

Rewrites

Students can rewrite unit exams and quizzes **if** the following conditions are met:

1. The student can show that they have completed all assigned work for the unit.
2. ALL corrections on the exam are complete including ALL supporting work.
3. The student has met with the teacher to go over corrections and related topic(s).
4. Both corrections and the rewrite are to be done outside of class time (ie. TAG, lunch)
5. The exam is re-written within 5 school days from the time it is handed back.

Communication

Please talk to me if you have any questions or concerns! You may always find me during the school day to chat (in class, TAG, lunch, before or after school) or you may email me tenellebrost@prrd8.ca

My final piece of advice for a successful semester...



Links & Resources

The following is a list of QR Codes and Links you may find useful for this semester.



Eagle Butte Website
<https://eaglebutte.myrps.com/>



AB Education
(Diploma Exam
Information)
<https://bit.ly/31Jdes5>



The Grand Math
Connection
<https://mathpqjq.com/>



ExamBank – Math 30-1
<http://alberta.exambank.com>
Login: pr.ebhs
Password: rock



Quest A+ (Practice Tests)
<https://questaplus.alberta.ca/>



Khan Academy (free tutorial videos)
<https://www.khanacademy.org/>
