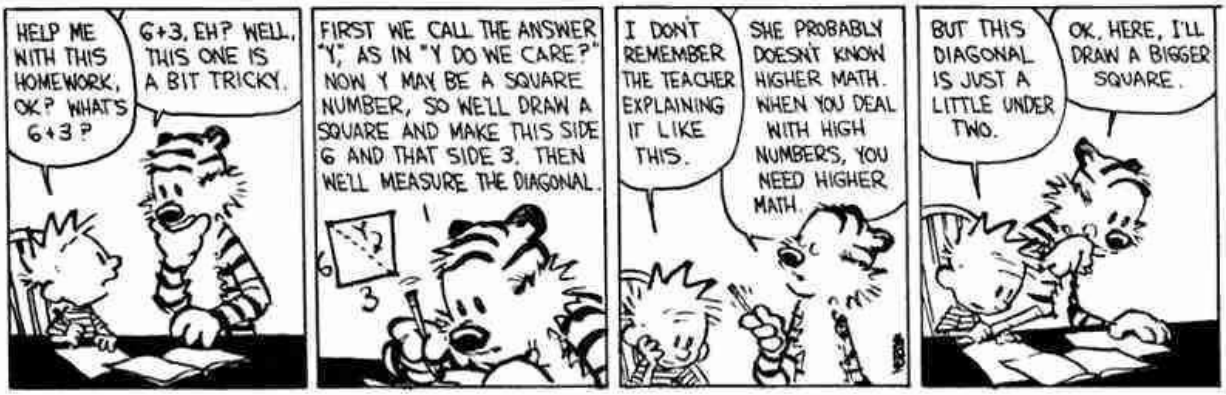
MATHEMATICS 10

Foundations of Mathematics and Pre-calculus



CLASSROOM EXPECTATIONS

Students are expected to:

- Refrain from the use of drugs or alcohol, including vaping.
- Refrain from verbal aggression and assault.
- Refrain from physical aggression and assault.

Students are expected to observe these classroom courtesies:

1. Be on time.
2. Come prepared to learn.
3. Demonstrate your learning each day.
4. Be respectful of the teacher, educational assistants, and classmates.
5. Respect the classroom environment.
6. If you know you will be away, please make me aware of it beforehand.

Students are expected to be familiar with these classroom routines:

Cell Phones: Cell phones belong in pockets or in my desk. There is one exception. Students who are using their phones responsibly to access calculator apps such as Desmos Graphing Calculator or ClevCalc are allowed to continue to do so.

Hand-In: Students may hand in complete (or incomplete) activities at any time during the semester.

Hall Passes: Students are expected to fill out hall passes themselves and explain to staff where they are going, and for how long, before they leave the classroom.

Support: Students may access support rooms during class. Students are expected to fill out hall passes so that they might access the rooms that are supervised as well as the LART rooms that are available if students need extra one-on-one support.

Missed: In our Google Classroom under Classwork, you will find the coursework, textbook, and additional information. If you are away from the classroom for a period of time, please contact me to establish expectations for at-home learning.

INTRODUCTION

The Curriculum Introduces Mathematics, ensures Flexible Teaching and Learning, and establishes the Goals and Rationale of this and any other Mathematics Programs claiming to meet the standards of the BC Ministry of Education.

There are several Important Considerations outlined within the curriculum. These considerations are intended to be infused within the design of this program and during each of the daily activities. These considerations include Inquiry in Mathematics, Mathematical Habits of Mind, and First Peoples Knowledge and Perspectives.

PROGRAM OF STUDIES

The Curriculum is full of insightful suggestions for the development and implementation of learning activities in the classroom. Pay particular attention to the sections about the three Core Competencies: Communication, Thinking, and Personal and Social.

The tasks are intended to offer all students opportunities to engage in meaningful and rigorous mathematics that allow for the development of and each of the interrelated sub-competencies: Communicating, Collaborating, Creative Thinking, Critical and Reflective Thinking, Personal Awareness and Responsibility, Positive Personal and Cultural Identity, and Social Awareness and Responsibility.

The curriculum is designed around five Big Ideas: Algebra, Powers & Polynomials, Rate of Change, Trigonometry, and Representing and Analyzing.

This program will be delivered via hand-crafted lessons and additionally supported through unique, curricular extension opportunities. Each activity will be vetted for its contribution to the development of the Curricular Competencies: Reasoning and Analyzing, Understanding and Solving, Communicating and Representing, and Connecting and Reflecting.

CONTENT

As the course progresses, we will document our time together. Students and Educators will agree on reasonable, fair grades in a build-a-grade fashion while completing course material.

Trigonometric Functions	10.8%
Arithmetic Sequences	30%
Linear Functions	
Systems of Equations	
Prime Factorization	28.8%
Powers	
Finance & Exponents	
Polynomial Multiplication	20.4%
Polynomial Factoring	
Functions and Relations Project	10%

COURSE CALENDAR

MATHEMATICS 10 SEMESTER PLAN					
WEEK	**MONDAY**	**TUESDAY**	**WEDNESDAY**	**THURSDAY**	**FRIDAY**
Sept 7 - Sept 11	Labour Day	School Based In-Service	Trigonometric Functions	Trigonometric Functions	Trigonometric Functions
Sept 14 - Sept 18	Trigonometric Functions	Trigonometric Functions	Trigonometric Functions	Trigonometric Functions	Trigonometric Functions
Sept 21 - Sept 25	Trigonometric Functions	Trigonometric Functions	Trigonometric Functions	Arithmetic Sequences	Arithmetic Sequences
Sept 28 - Oct 2	Arithmetic Sequences	Arithmetic Sequences	National Day of Truth & Reconciliation	Arithmetic Sequences	Arithmetic Sequences
Oct 5 - Oct 9	Arithmetic Sequences	Arithmetic Sequences	Arithmetic Sequences	Arithmetic Sequences	Arithmetic Sequences
Oct 12 - Oct 16	Thanksgiving Day	Linear Functions	Linear Functions	Linear Functions	Linear Functions
Oct 19 - Oct 23	Linear Functions	Linear Functions	Linear Functions	Linear Functions	Provincial Pro-D Day
Oct 26 - Oct 30	Linear Functions	Linear Functions	Systems of Equations	Systems of Equations	Systems of Equations
Nov 2 - Nov 6	Systems of Equations	Systems of Equations	Systems of Equations	Systems of Equations	Systems of Equations
Nov 9 - Nov 13	Systems of Equations	Systems of Equations	Remembrance Day	Prime Factorization	Prime Factorization
Nov 16 - Nov 20	Prime Factorization	Prime Factorization	Prime Factorization	Prime Factorization	Prime Factorization

MATHEMATICS 10 SEMESTER PLAN

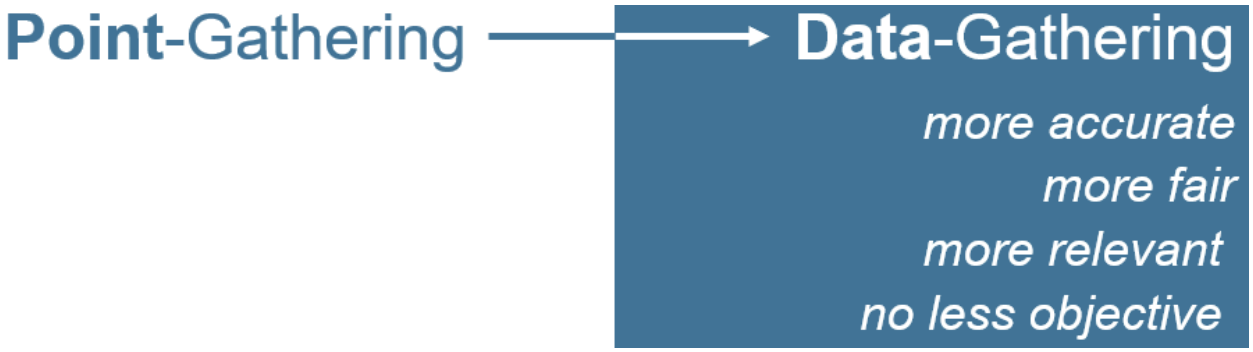
WEEK	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Nov 23 - Nov 27	Powers	Powers	Powers	Powers	District PD-Day
Nov 30 - Dec 4	Powers	Powers	Powers	Powers	Powers
Dec 7 - Dec 11	Finance & Exponents	Finance & Exponents	Finance & Exponents	Finance & Exponents	Finance & Exponents
Dec 14 - Dec 18	Finance & Exponents	Polynomial Multiplication	Polynomial Multiplication	Polynomial Multiplication	Polynomial Multiplication
Dec 21 - Dec 25	Christmas Break				
Dec 28 - Jan 1	Christmas Break				
Jan 4 - Jan 8	In-Service	Polynomial Multiplication	Polynomial Multiplication	Polynomial Multiplication	Polynomial Factoring
Jan 11 - Jan 15	Polynomial Factoring	Polynomial Factoring	Polynomial Factoring	Polynomial Factoring	Polynomial Factoring
Jan 18 - Jan 22	Polynomial Factoring	Polynomial Factoring	Polynomial Factoring	Functions and Relations Project	Functions and Relations Project
Jan 25 - Jan 29	Functions and Relations Project	Functions and Relations Project	Functions and Relations Project	Functions and Relations Project	Course Wrap-Up

ASSESSMENT

Your teacher is interested in observing the improvements and learning that take place rather than searching for errors on multiple choice exams.

As a result, you will be asked to demonstrate your learning through conversations, observations, and products. Everything counts,

This is a movement from a points-gathering system of grading to a data-gathering system. When learning is prioritised, assessment must reflect that.



Your teacher will provide immediate, verbal feedback and will use a variety of forms of assessment throughout the course. In addition, each learning opportunity will provide information that will be used while assigning your final grade.

Name	Learning Outcome									
	1	2	3	4	5	6	7	8		
Aaron	Ex	P	Ex	P	P	P	P	Ex	→	Ex
	5	4	5	4	4	4	4	5	→	88%
Denise	D	Em	P	D	P	D	Em	D	→	D
	3	2	4	3	4	3	2	3	→	60%

ASSESSMENT

Tasks will be designed to build trust, meaning, and capacity. All students should be able to meaningfully participate in a well-designed sequence of tasks and make sense of their learning.

As the course progresses, we will document our time together.

Students may not be able to meaningfully participate in activities without having previously discerned key mathematical attributes. Tasks might require students to have previously discerned one or more attributes in a given mathematical context.

Previous learning and experiences will lend meaning and opportunity for students participating in inquiries as they apply what they have learned so far to new situations.

Students will need to engage in dialogue, discern key mathematical ideas, and overcome potential frustrations and impediments.

Meaningful participation in tasks will alert educators to students who may wish to widen or deepen their understanding of the material and the purposes therein.

Grades will be determined by looking at a student's overall performance in each content area, taking into account the development of skills throughout the course and the consistency with which a student demonstrates those skills.

A final project will provide students with one last opportunity for learning in the last week of class.