



Mathematics-2

Once you successfully complete Mathematics 10C, you will need to decide which course sequence will meet your needs during the rest of your high school career and beyond. Whether you plan on pursuing further studies or entering the workforce directly, the mathematics program is designed to help you develop the appropriate skills.

There is a mathematics course that will meet your needs, no matter how your plans change.



Who should take the Mathematics-2 course sequence?

- *Mathematics-2 is designed for students who want to attend a university, college, or technical institute after high school, but do not need calculus skills.*
- *If you want to study at the post-secondary level in fields such as arts programs, some engineering and medical technologies, or some apprenticeship programs, you should take Mathematics-2. This sequence will fulfill most high-school students' needs.*
- *You should always check the most up-to-date information on post-secondary mathematics entrance requirements. A good place to start is the admissions page of the post-secondary institution that you would like to attend, or the [Alberta Learning Information Service \(ALIS\) website](#), which outlines information regarding mathematics requirements at post-secondary institutions and programs in Alberta.*



What will I learn in Mathematics-2?

- You will develop logical reasoning techniques, including inductive and deductive reasoning.
- You will study a variety of *relations and functions*, both graphically and algebraically, including quadratic, radical, polynomial, rational, sinusoidal, exponential, and logarithmic functions.
- You will extend your knowledge of *trigonometry* to include sine and cosine laws to solve any triangle.
- You will be introduced to counting techniques involving *permutations and combinations*.
- You will complete a *Mathematics Research Project*, involving the collection and analysis of data in a mathematical area of interest, in both Mathematics 20-2 and 30-2.

What do I do if my interests or future plans change?

- The Grades 10–12 Mathematics Program was designed to be *flexible* and to support student needs.
- After completing Mathematics 20-2, you can continue and complete Mathematics 30-2.
- If you decide that the -1 course sequence is more appropriate for your future plans, you can transition by taking Mathematics 20-1 and then 30-1. Or, you can take Mathematics 30-1 after successfully completing Mathematics 30-2.
- If you decide that Mathematics 30-3 is more useful for you, you can take that course instead of Mathematics 30-2.
- No matter how your plans change, there is a mathematics course that will meet your needs.