## MATHEMATICS

The math curriculum includes 3 available pathways for students. The three pathways available are: Apprenticeship and Workplace Mathematics, Foundations of Mathematics, and Pre-Calculus. At the grade 10 level, a common Foundations of Mathematics and Pre-Calculus course is the starting point for both the Foundations of Mathematics and Pre-Calculus pathways. When choosing a pathway, students should consider their interests, both current and future. Students and parents/guardians are encouraged to research the admission requirements for post-secondary programs of study as they vary by institution and by year.

## GRADE 10 B.C. GRADUATION NUMERACY ASSESSMENT

For all students in the B.C. Graduation Program, it is mandatory that they complete the Grade 10 Graduation Numeracy Assessment, which focuses on the demonstration and application of numeracy. Students will be registered to write this mandatory assessment in grade 10, and have the opportunity to rewrite it up to 2 additional times in grades 11 and /or 12.


Principles of Mathematics 9 further expands the scope and depth of learning of the key areas of mathematics - computational fluency, number, patterns and relations, spatial sense, and statistics and probability. The topics in Principles of Mathematics 9 include: exponents, polynomials, linear relations, multi-step equations, proportional reasoning, statistics, and financial literacy.

## WORKPLACE MATHEMATICS 10 MWPM-10

This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for direct entry into the work force. The topics in Workplace Math 10 include: statistics, probability, financial literacy, trigonometry and measurement.

## FOUNDATION OF MATHEMATICS \& PRE-CALCULUS 10 MFMP-10

This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies. This course leads to either Foundations of Mathematics 11 or Pre-Calculus 11. The topics in Foundation of Mathematics and Pre-calculus 10 include: trigonometry, algebra, financial literacy and linear functions.

| WORKPLACE MATHEMATICS 11 | MWPM-11 |  |
| :--- | :--- | :--- |

This pathway is designed to provide students with the mathematical understandings and critical thinking skills identified for direct entry into the work force. The topics in Workplace Mathematics 11 include: statistics, probability, financial literacy, trigonometry and rate of change.

## FOUNDATIONS OF MATHEMATICS 11

MFOM-11
This pathway is designed to provide students with the mathematical understandings and critical thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus. The topics in Foundations of Mathematics 11 include: financial literacy, graphical analysis, mathematical reasoning, statistics and scale models.

## PRE-CALCULUS 11

MPREC11
This pathway is designed to provide students with the mathematical understandings and critical thinking skills identified for post-secondary studies in programs that require the study of theoretical calculus (e.g. Sciences and Engineering). The topics in Pre-calculus 11 include: the real number system, powers and radicals, quadratic functions, trigonometry and financial literacy.

## FOUNDATIONS OF MATHEMATICS 12

MFOM-12
This course is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in the arts or the humanities. The topics in Foundations of Mathematics 12 include: financial mathematics, geometry, probability, combinatorics and regression analysis.

## PRE-CALCULUS 12

MPREC12
This course is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into post-secondary programs that require the study of theoretical calculus, like Mathematics, Sciences or Engineering. The topics in Pre-calculus 12 include: trigonometry, relations and functions (exponential \& logarithmic, polynomial, radical, rational, and transformations) and geometric sequences and series.

## CALCULUS 12 MCALC12

Calculus 12 is an elective course taken in conjunction with Pre-Calculus 12. The course is intended to help prepare students for university calculus courses. The topics in Calculus 12 include: differentiation and integration.

