- A Math 10 (4 credits), and a Math 11 or 12 (4 credits) are required for graduation.
- The Provincial Numeracy Assessment must be completed prior to graduation. It is recommended this be completed in your Grade 10 Math course.
- Scientific calculators are required for all math courses, but the use of calculators is at the individual teacher's discretion.


## MATH 9

In Math 9, students will develop mathematical understandings, and critical-thinking and communication skills required to be successful in math. They will explore a variety of topics including problem solving, number sense, and financial literacy. Through investigations of relations, functions, and polynomials, students will continue to develop the required algebra skills to solve problems. After successful completion of this course, students will be ready to enroll in Workplace Math 10 or Foundations \& Pre-Calculus 10.

## FOUNDATIONS OF MATH \& PRE-CALCULUS 10

 PREREQUISITE: Mathematics 9 - Recommended Grade of $\mathrm{C}+$ or higher and good work ethic This course meets the "Mathematics 10" graduation requirementIn Foundations \& Pre-Calculus, students will develop the mathematical understandings and criticalthinking skills identified for post-secondary studies. They will explore a variety of topics including problem solving, number sense, algebra, relations, functions, exponent laws, factoring polynomials, arithmetic sequences, and financial literacy. After successful completion of this course, students will be ready to enroll in Foundations of Math 11 or Pre-Calculus 11.

## WORKPLACE MATH 10

This course meets the "Mathematics 10" graduation requirement
In Workplace Math 10, students will develop mathematical understandings and critical-thinking skills identified as useful for direct entry into the work force and entrance into some Trades programs. Students will explore a variety of topics, including problem solving, number sense, geometry, and measurement.

## FOUNDATIONS OF MATH 11

PREREQUISITE: Foundations and Pre-Calculus Math 10 This course meets the "Mathematics 11 or 12" graduation requirement
Foundations of Math 11 is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs like Geography, Arts, or Humanities, as these programs do not require the study of theoretical calculus. Students will explore topics such as relations and functions (graphical analysis), angle relationships, trigonometry, scale models, financial literacy, logical reasoning and statistics. This course satisfies the Math 11 requirement for graduation, but may not be sufficient for entry into some post-secondary programs without further study in Math 12.

## FOUNDATIONS OF MATH 12

PREREQUISITE: Recommended grade of C+ or higher and good work ethic in Foundations 11 or PreCalculus 11
This course meets the "Mathematics 11 or 12" graduation requirement
Foundations of Math 12 is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs such as Nursing, Economics, Geography, Arts, or Humanities. Topics include logical reasoning, relations and functions, permutations and combinations, and probability. To be successful in this program, students must have excellent work and study skills. This course may be required for entry in to some post-secondary programs, but does not meet the requirement for all programs.

## PRE-CALCULUS 11

PREREQUISITE: Foundations \& Pre-Calculus Math 10 Recommended grade of $\mathrm{C}+$ or higher and good work ethic
This course meets the "Mathematics 11 or 12" graduation requirement
Pre-Calculus 11 is designed to provide students with the mathematical understandings and criticalthinking skills identified for entry into post-secondary programs that require the study of theoretical calculus like Business, Sciences, or Engineering. You will explore a variety of topics including algebra, radicals, measurement, quadratic relations and functions, trigonometry, and financial literacy. This course satisfies the Mathematics 11 requirement for graduation, but may not be sufficient for entry into some post-secondary programs without further study in Mathematics 12.

## PRE-CALCULUS 12

PREREQUISITE: Pre-Calculus Math 11 - Recommended Grade of $\mathrm{C}+$ or higher and good work ethic
This course meets the "Mathematics 11 or 12" graduation requirement
This pathway will provide a challenge and enrichment to those students who have demonstrated superior ability in mathematics. This course is abstract and theoretical with an emphasis on problem-solving skills that require the use of higher mental processes. These mathematical understandings and critical-thinking skills are required for entry into post-secondary programs that require the study of theoretical calculus like Sciences or Engineering. Topics include algebra and number sense, measurement, relations and functions, trigonometry, exponential functions, and logarithms. Students in this program must have excellent work and study skills. This course may be required for entry in to some post-secondary programs.

## CALCULUS 12

PREREQUISITE: Pre-Calculus Math 12 - Recommended Grade of $B$ or higher and good work ethic This course meets the "Mathematics 11 or 12" graduation requirement
In Calculus 12, students will explore infinitesimal change and limits, leading to differential and integral calculus. They will learn about instantaneous rates of change, area under curves, and applications of Calculus. If students have strong algebra skills, and enjoy a challenge, Calculus 12 will prepare them for further study in Mathematics, Sciences, Engineering, or Business at a post-secondary level.

## APPRENTICESHIP MATH 12

This satisfies the "Mathematics 11 or 12" graduation requirement
This pathway is specifically designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into some post-secondary Trades programs and for direct entry into the work-force. Topics include measurement tools, geometry, trigonometry, design process using 2D/3D shapes, and financial literacy. This course may be accepted for entrance into some Post-Secondary Trades programs. Students should research their post-secondary options as entrance requirements vary by program, by year, and by institution.

