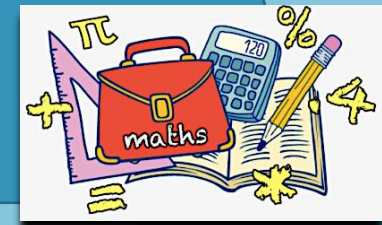


Functions and Applications (MCF3M)



This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modelling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Quadratic Functions

- Demonstrate an understanding of the numeric, graphical, and algebraic representations of quadratic functions
- Expand and simplify quadratic expressions
- Solve quadratic equations and world problems involving quadratic functions

Exponential Functions

- Connect numeric, graphical, and algebraic representations of exponential functions
- Simplify and evaluate numerical expressions involving exponents
- Demonstrate an understanding of compound interest and annuities

Trigonometric Functions

- Solve problems using the primary trigonometric ratios, sine law, and cosine law
- Demonstrate an understanding of periodic relationships and the sine function
- Solve problems involving the sine function