

## **Mathematics (2)**

Integrals: Anti-Derivatives and Indefinite Integrals, Change of Variable, Summation Notation and Area, the Definite Integral, Properties of the Definite Integral, the Fundamental Theorem of Calculus, Application of the Definite Integral, Area, Volume by Cylindrical Shells, Volume by Cross Sections. Techniques of Integration: Integration by Parts, Trigonometric Integrals, Trigonometric Substitution, Integral of Rational Functions, Sequences,