

AICE Calculus & Mech1

Functions Reporting Standard

ACM1.1-Manipulate, analyze and compare quadratic functions and their graphs.

ACM1.2-Understand and apply function concepts including inverses, composition, domain and range.

ACM1.5-Manipulate, analyze and apply trigonometric functions and their graphs.

Systems and Arc Length Reporting Standard

ACM1.3-Understand and use the graphs, equations and intersections of lines to solve problems.

ACM1.4-Calculate and apply arc length and sector area using degrees and radians.

Vectors and Series Reporting Standard

ACM1.6-Understand, use and apply notation for and operations involving vectors and scalars.

ACM1.7-Understand, manipulate and apply arithmetic, geometric and convergent geometric series.

Differentiation Reporting Standard

ACM1.8-Calculate and use derivatives to find slopes, stationary points, and analyze functions.

ACM1.11-Use formulae and differentiation to analyze linear displacement, velocity and acceleration.

Integration Reporting Standard

ACM1.9-Calculate and use integrals to analyze functions and find areas and volumes of bounded regions.

ACM1.11-Use formulae and integration to analyze linear displacement, velocity and acceleration.

Application Reporting Standard

ACM1.10-Understand and apply vector force, equilibrium, friction and Newton's 3rd law to solve problems.

ACM1.12-Use and apply Newton's laws to calculate particle motion.

ACM1.13-Understand energy, work and power and apply appropriate formulae to solve problems.
