

Mathematics – Grade 11- Advanced Functions Placement

MCR3UP

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; and develop facility in simplifying polynomial and rational expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems. The mathematics department **strongly recommends** a minimum average of 80% in MPM2D1 or MPM2DP. This course prepares students for the grade 12 Advanced Placement course MHF4UP, covering the grade 11 MCR3U1 topics, as well as loci and conics, polynomial functions, logarithms, and trigonometric tools for calculus.

Prerequisite: MPM2DP