Name: Mrs. Woods	Grading Quarter: 1	Week Beginning: 9/25/23
School Year: 23-24	Subject: AP Calculus AB	

	Notes:	Objective	Academic Standards
Monday	Notes:	Objective: Students will be able to find absolute maximums and minimums of a function of a given interval. Lesson Overview: Notes – Extreme Value Theorem, Candidates Test Use book examples first, then Khan Academy examples for extra practice	Academic Standards: 5.2 Extreme Value Theorem, Global Versus Local Extrema, and Critical Points 3.E Provide reasons or rationales for solutions and conclusions. 5.5 Using the Candidates Test to Determine Absolute (Global) Extrema 1.E Apply appropriate mathematical rules or procedures, with and without technology
Tuesday	Notes:	Objective: Students will be able to apply MVT to a differentiable function. Lesson Overview: Notes – Mean Value Theorem Use the first derivative to find where a function is increasing or decreasing using a sign chart	Academic Standards: 5.1 Using the Mean Value Theorem 3.E Provide reasons or rationales for solutions and conclusions. 5.3 Determining Intervals on Which a Function is Increasing or Decreasing 2.E Describe the relationships among different representations of functions and their derivatives.
Wednesday	Notes:	Objective: Students will be able take derivatives of common formulas to solve related rates problems. Lesson Overview: Use Khan Academy to practice extra related rates problems.	Academic Standards: 4.4 Introduction to Related Rates 1.E Apply appropriate mathematical rules or procedures, with and without technology. 4.5 Solving Related Rates Problems 3.F Explain the meaning of mathematical solutions in context.
Thursday	Notes:	Objective: Students will be able to find relative maximums and minimums of a function of a given interval. Lesson Overview: Notes – First derivative test (max and mins), Second derivative test (max and mins), Inflection points (critical points of second derivative), and concavity	Academic Standards: 5.4 Using the First Derivative Test to Determine Relative (Local) Extrema 3.D Apply an appropriate mathematical definition, theorem, or test. 5.6 Determining Concavity of Functions over Their Domains 2.E Describe the relationships among different representations of functions and their derivatives. 5.7 Using the Second Derivative Test to Determine Extrema 3.D Apply an appropriate mathematical definition, theorem, or test.

Friday	Notes:	Objective: Students will be able take derivatives of common formulas to solve related rates problems. Lesson Overview: Related Rates Quiz	Academic Standards: 4.4 Introduction to Related Rates 1.E Apply appropriate mathematical rules or procedures, with and without technology. 4.5 Solving Related Rates Problems 3.F Explain the meaning of mathematical solutions in context.