

AP Calculus AB: January 2015

What's on the midterm?

Taught?	On Midterm?	
Yes	Yes	Tangent Lines
Yes	Yes	Slopes of Secant and Tangent Lines
Yes	Yes	Graphical Approach to Limits
Yes	Yes	Finding Limits Algebraically
Yes	Yes	Definition of Derivative
Yes		Derivatives Using Technology
Yes	Yes	Techniques of Differentiation
Yes	Yes	Differentiation by the Chain Rule
Yes	Yes	Differentiation of Trig Functions
Yes	Yes	Implicit Differentiation
Yes	Yes	Continuity and Differentiation
Yes	Yes	Related Rates
Yes	Yes	Straight Line Motion
Yes	Yes	Rolle's and the Mean Value Theorem
Yes	Yes	Function Analysis
Yes	Yes	Finding Absolute Extrema
		Newton's Method of Roots (*)
		Approximation Using Differentials (*)
Yes	Yes	Optimization Problems
Yes		Economic Optimization Problems
Yes		Indefinite Integration
Yes		u-Substitution
Yes		Sigma Notation
Yes		Area Under Curve
Yes		Riemann Sums
		Exact Area Under a Curve (*)
		Definite Integral as Area
		Accumulation Function
		Fundamental Theorem of Calculus
		Definite Integration with u-Substitution
		Straight Line Motion Revisited
		Average Value/ nd Fundamental Theorem
		Area of Region Between Curves
		Volume by Disks and Washers
		Volume by Cylindrical Shells (*)
		Review of Exponentials and Logarithms
		Differentiation of the ln function
		Integration and the ln function
		Derivatives and Integrals with "e"
		Inverse Trig Functions
		Integration and Inverse Trig Functions
		Derivatives of Inverse Functions
		Differential Equations by Separation of Variables
		Slope Fields
		Exponential Growth
		Exponential Growth Continuation
		Taking "Impossible" integrals
		L'Hopital's Rule for Indeterminate Forms (*)
		(*) Not currently on the AB Calculus Exam