Learning Goals

Understand Limits and Derivatives

		1: Be able to calculate average rates of change algebraically.
		2: Be able to compute instantaneous rate of change by using average rates of change.
		3: Be able to evaluate limits of basic functions algebraically.
		4: Be able to evaluate limits of basic functions geometrically.
		5: Be able to use the limit definition to find derivatives.
		6: Be able to use first derivative to describe the monotonicity of a function.
		7: Be able to use second derivative to describe concavity of a function.
		8: Be able to determine whether a function has a limit at a point.
		9: Be able to determine whether a function is continuous at a point.
		10: Be able to determine whether a function is differentiable at a point.
		11: Be able to find the algebraic equation of tangent lines to a differentiable function.
		12: Be able to use the tangent line of a function to approximate function values.

Compute Derivatives

		13: Be able to compute derivatives of polynomials.
		14: Be able to compute derivatives of exponential functions.
		15: Be able to compute derivatives of logarithmic functions.
		16: Be able to compute derivatives of trigonometric functions.
		17: Be able to compute derivatives of anti-trigonometric functions.
		18: Be able to compute derivatives using product rule.
		19: Be able to compute derivatives using quotient rule.
		20: Be able to compute derivatives using the chain rule.
		21: Be able to find derivatives of inverse functions.

Apply Derivatives

		22: Be able to find derivatives using implicit differentiation.
		23: Be able to use derivatives to find local extreme values.
		24: Be able to use derivatives to find global extreme values.
		25: Be able to solve related rates problem.
		26: Be able to solve optimization problem.