

Calculator Functions for the AP Calc Exam

	Task	Calculator Keys	Example
Saving Time & Avoiding Typos	Store Functions	Enter into [Y=] To retrieve, [ALPHA] [Trace], then select from menu	$\int_3^5 Y_2 dx$
	Store Values	[ANS] on home screen STO \triangleright ALPHA (pick favorite letter)	Storing the intersections of two curves for use in a volume with washers problem $\pi \int_D^E (Y_1)^2 - (Y_2)^2 dx$
Graph Analysis	Find zeros of a function	[Y=] [GRAPH] [2 nd] [Trace] [2:Zero] Move cursor left bound, then right bound, of the x-intercept. [ENTER]	When is the particle at rest? (Set velocity function=0 and solve with calculator)
	Find intersections of curves or solve equations	Enter both functions into [Y=] as Y_1 and Y_2 [2 nd] [Trace] [5:Intersect] Put cursor on 1 st curve, then 2 nd curve, [ENTER]	Determining the limits of integration when finding the area of a region bounded by two curves
	Graph a derivative	[Y=] $Y_1 = f(x)$ $Y_2 = \frac{d}{dx}(Y_1) _{x=x}$	Finding where $f'(x) = 0$
Evaluating Derivatives and Integrals	Calculate a derivative numerically	[MATH] [8:nDeriv()] then fill in template $\frac{d}{d\Box}(\Box) _{x=\Box}$ Older models: nDeriv($f(x), x, a$) to find $f'(a)$	$\frac{d}{dX}(e^{\sqrt{x}} + 3x) _{x=8}$ $= 5.990854627$
	Evaluate a definite integral	[MATH] [9:fnInt()] then fill in template $\int_{\Box}^{\Box} \Box d\Box$ Older models: fnInt($f(x), x, a, b$) to find $\int_a^b f(x) dx$	$\int_2^4 \sin x dx$ $= 0.2374967843$