FLOW CHART FOR EVALUATING AN INTEGRAL WITH UPPER & LOWER LIMITS OF INTEGRATION (POST-CHAPTER 7)

You must execute the flow chart in this precise order.
If you do not, the results may be incorrect.
NOTE that finding antiderivatives is the LAST choice of action.

	CRITERION	IF ANSWER IS "YES"
1.	Is the upper limit ∞, or the lower limit $-\infty$?	Use improper integral process
2.	Does the function have an infinite discontinuity (ie. goes to ∞ or $-\infty$) at any point in the interval ?	Use improper integral process
3.	Are the limits opposites ?	
	a. Is the integrand odd ?	The integral is 0
	b. Is the integrand a sum of terms (or can it be written as a sum of terms), some of which are odd ?	Write the integral as the sum of an integral of the odd terms and an integral of the remaining terms; apply 3a to the first integral and evaluate the second integral using the steps below
4.	Is the integrand piecewise (may involve absolute values), or does it have jump discontinuities ?	Write the integral as the sum of integrals, one for each interval over which the integrand has a single formula (not using absolute values) and is continuous and evaluate those integrals using the steps below
5.	Do any terms of the integrand correspond to a line, or a quarter- or half-circle over the interval ?	Write the integral as the sum of an integral of those linear/circle terms and an integral of the remaining terms; use formulae for areas of rectangles, triangles, trapezoids, quarter- or half-circles to evaluate the first integral and evaluate the second integral using the steps below
6.		Evaluate all remaining integrals using FTC Part 2 (ie. find the antiderivative of the integrand, substitute the limits of integration and find the difference)