The calculator will graph \( \int_a^x f(t) \, dt \) but the graphing is painfully slow if the tolerance setting is small. Change the tolerance setting to 1 (TOLER is 2nd/CLEAR). Graphing is still slow but tolerable. Higher tolerance settings seem to have no effect. Using \( \cos(x) \) as an example, on a blank line on the \( y(x)= \) screen, enter \( \text{fnint}(\cos t,t,0,x) \), choose the ZTRIG window and graph.

Students have trouble understanding that the definite integral above actually defines a function. Seeing it graphed may help. Another possibility is to have the students sketch a rough graph just by plotting points. A table of values could be generated without too much work using the ideas from the last section.

The above example can be repeated with 0 replaced by \( \pi/2 \) or some other number to demonstrate the role of the constant.

The calculator will also graph the derivative of the function. If the function is in \( y1 \), enter \( \text{nDer}(y1,x,x) \) in \( y2 \) and graph. Take a coffee break; this is ridiculously slow.

You can skip the graphing and find numerical derivatives. The command \( \text{nDer}(\text{fnInt}(t^2,t,0,x),x,3) \) will return 9 (\( =3^2 \)).