

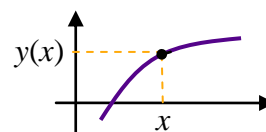


Lesson 7.3 – Graph Analysis with the TI-84

Once a function is stored in the TI-84, we can analyze its graph using the options in the CALCULATE menu. Press [2ND] [TRACE] to view this menu:

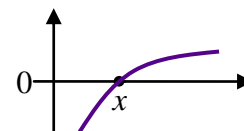
1:value

Input x .
Output $y(x)$. (height)



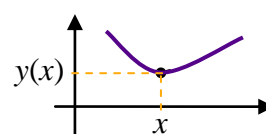
2:zero

Input lower and upper bounds, and an initial guess.
Output an x such that $y(x) = 0$. (x -intercept, root)



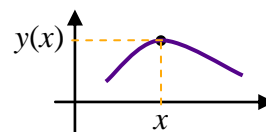
3:minimum

Input lower and upper bounds, and an initial guess.
Output the point at which y has a local minimum.



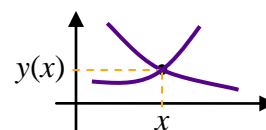
4:maximum

Input lower and upper bounds, and an initial guess.
Output the point at which y has a local maximum.



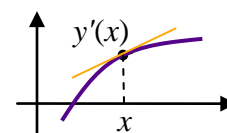
5:intersect

Input two curves and an initial guess.
Output the intersection point.



6:dy/dx

Input x .
Output $y'(x)$. (slope, derivative)



7: $\int_a^b f(x) dx$

Input lower and upper limits of integration, a and b .
Output $\int_a^b y(x) dx$. (net area, definite integral)

