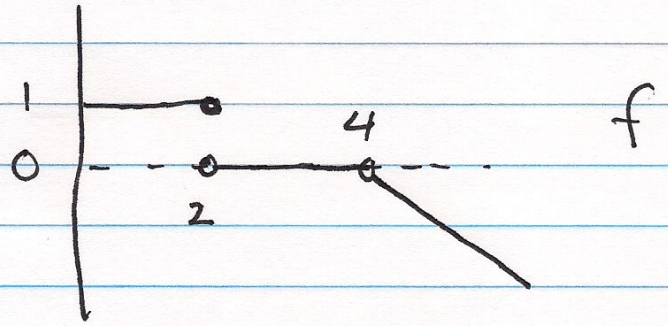
Problem 8

Graph:

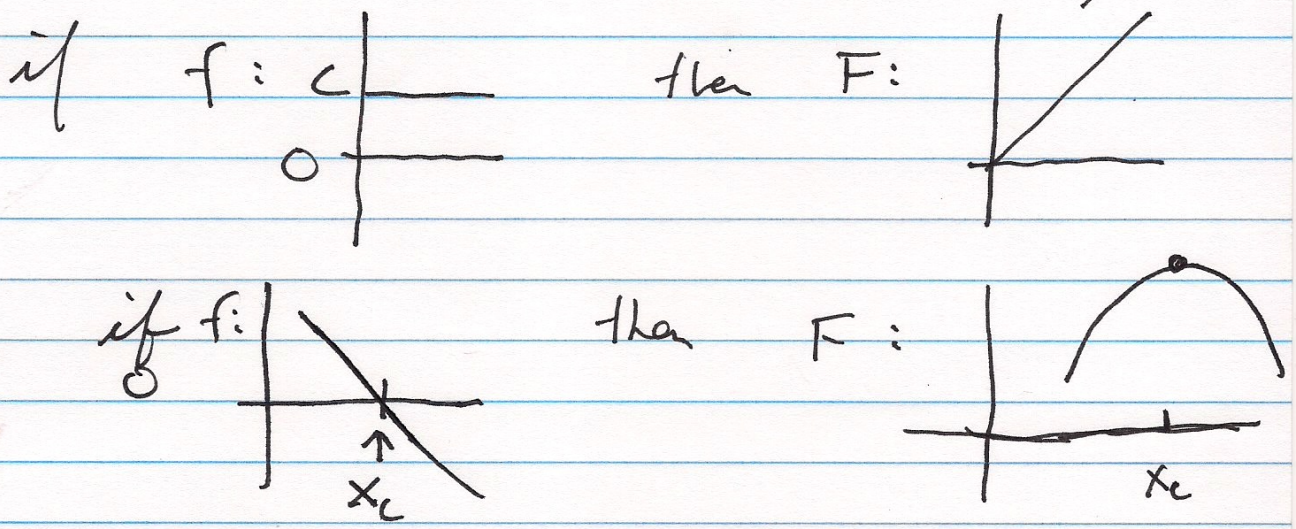
~~Compute~~: $\int_0^x f(s)\,ds$

given $f(x) = \begin{cases} 1 & \text{for } 0 < x < 2 \\ 0 & \text{for } 2 < x < 4 \\ -x+4 & \text{for } x > 4. \end{cases}$

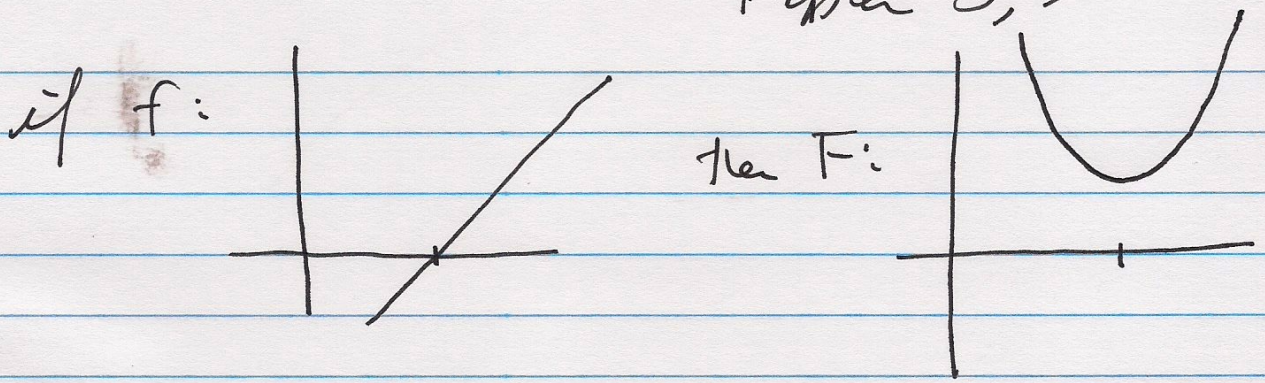
First graph f:



& use these "Icons"



Problem 8, soln



The steeper the line
the "sharper the ~~hyperbola~~ parabola"

Finally: F is always continuous
& ~~up~~ where f is
continuous F's derivatives
"match up": have continuous!