HW#3 Due Jan 25, 2022

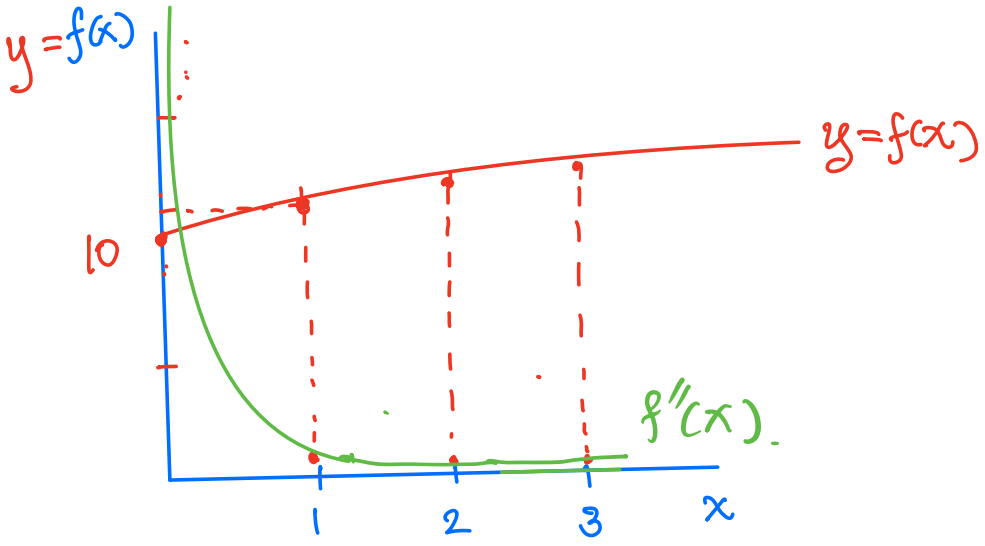
HW Find the 2nd -order derivative of $y = f(x) = 10 + \sqrt{x}$ and fill in the table:

Point	x	y	$f'(x)$	$f''(x)$
	0	10	∞	∞
A	1	11	0.5	$-1/4$
B	2	11.414	0.35	-0.088
C	3	11.732	0.29	-0.048

$\frac{1}{2}x^{-1/2} - \frac{1}{4}x^{-3/2}$

Plot the graph of y and $f'(x)$. Is $f'(x)$ linear?

$f'(x) = \frac{1}{2\sqrt{x}}$, $f''(x) = -\frac{1}{4}x^{-3/2}$



$f'(x)$ is not linear.