

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	-0.25
B	2	11.414	0.354	-0.098
C	3	11.732	0.288	-0.048

$$f'(x) = \frac{1}{2\sqrt{x}}$$

$$f''(x) = -\frac{1}{4x\sqrt{x}}$$

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

