

HW#2 Due Jan 20, 2022

HW Given $y = 10 + \sqrt{x}$,

- a) Find the derivative $f'(x)$.
- b) Fill in the table

Point	X	Y	$f'(x)$
	0	10	
A	1	11	
B	2	11.414	
C	3	11.732	

- c) Does the slope increase as x increases?
- d) Approximate the change in Y when $\Delta x = 0.2$ at $x_1 = 3$. Is the approximation under- or over-estimate?