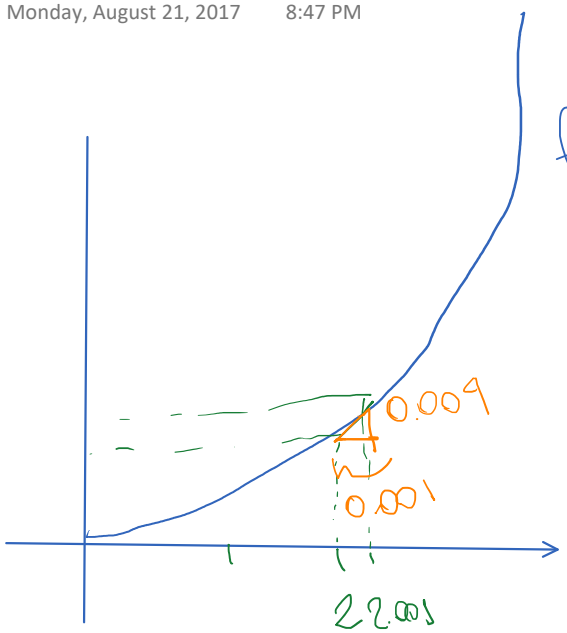
Intuition about Derivates

Monday, August 21, 2017 8:47 PM



$a=2 \rightarrow f(a)=4$

$a=2.001 \rightarrow f(a)=4.009$

$a=3 \rightarrow f(a)=9$

slope (derivative of $f(a)$ at $a=2$ is 4

$\frac{d}{da} f(a)=4 \therefore a=2$

$\frac{d}{da} f(a) = \frac{d}{da} a^2$

$= 2a$

$a=5 \rightarrow f(a)=25$

$a=5.001 \rightarrow f(a)=25.010$

$\frac{d}{da} f(a)=10$ When $a=5$