# Daily Warm-up

**Think-Aloud**

Name: Period:

Date:

Text from a book . . .

Theorem 3: Mean Value Theorem for Derivatives

If $y = f(x)$ **is continuous** at every point of the closed interval **[a, b]** and **differentiable** at every point of its interior **(a, b)**, then there is at least one point $c$ in (a, b) at which $f'(c) = \dfrac{f(b) - f(a)}{b - a}$

## Connect to prior knowledge

$y = f(x)$ **is continuous** on closed interval **[a, b]**

don't pick up pencil when drawing between [a,b]

$y = f(x)$ **is differentiable** on **(a, b)**

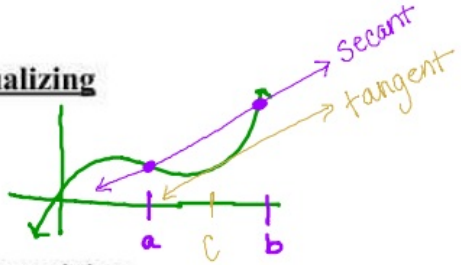
no corners or cusps

c some value on the x-axis within the interval of [a,b]

$f'(c)$ slope of f at x=c / instantaneous rate of change

$\dfrac{f(b) - f(a)}{b - a}$ average rate of change

## Visualizing




## Summarizing