Secants → Tangent

\[ x_0 + \Delta x \]
Secants → Tangent

\[ x_0 \quad \rightarrow \quad x_0 + \Delta x \]
Secants $\rightarrow$ Tangent
Secants $\rightarrow$ Tangent

$x_0 \quad x_0 + \Delta x$
Secants $\rightarrow$ Tangent

$x_0$
Clicker Question

Is the instantaneous rate of change ever equal to the average rate of change between $x_1$ and $x_2$?
Clicker Question

Is the instantaneous rate of change ever equal to the average rate of change between $x_1$ and $x_2$?
Clicker Question

Is the instantaneous rate of change ever equal to the average rate of change between $x_1$ and $x_2$? Yes!