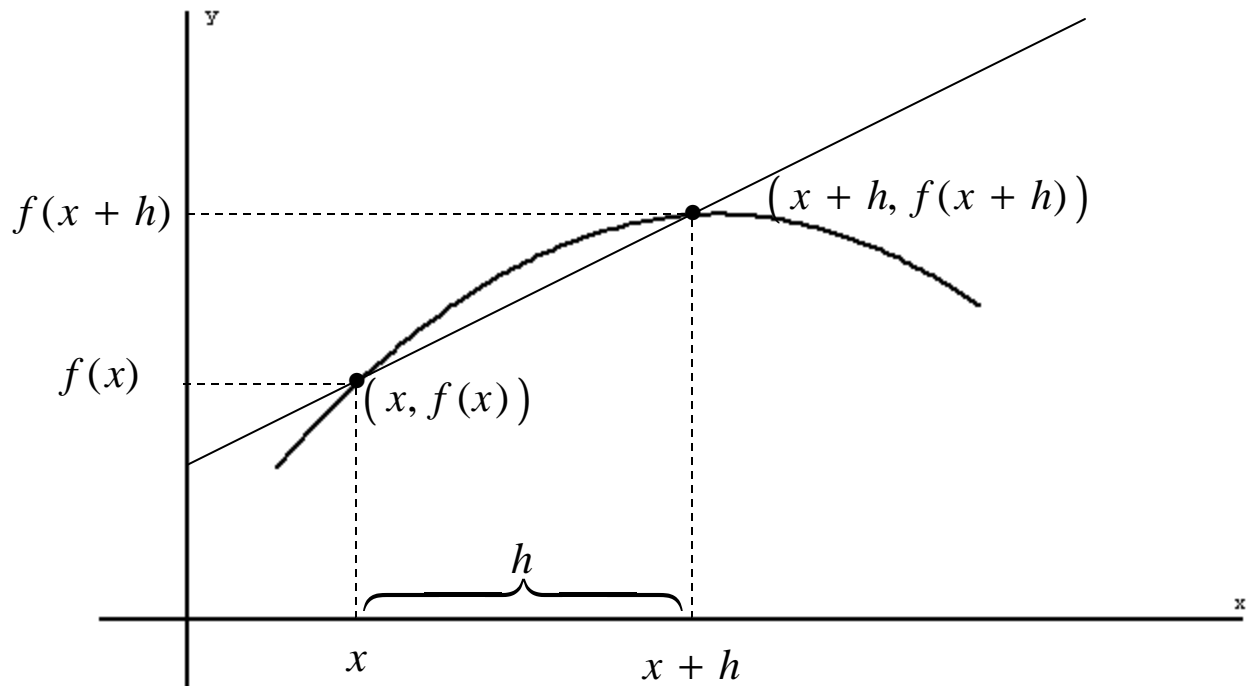


# The Difference Quotient



$$m_{\text{sec}} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{f(x+h) - f(x)}{(x+h) - x} = \frac{f(x+h) - f(x)}{h}$$

The Difference Quotient:  $\frac{f(x+h) - f(x)}{h}$