

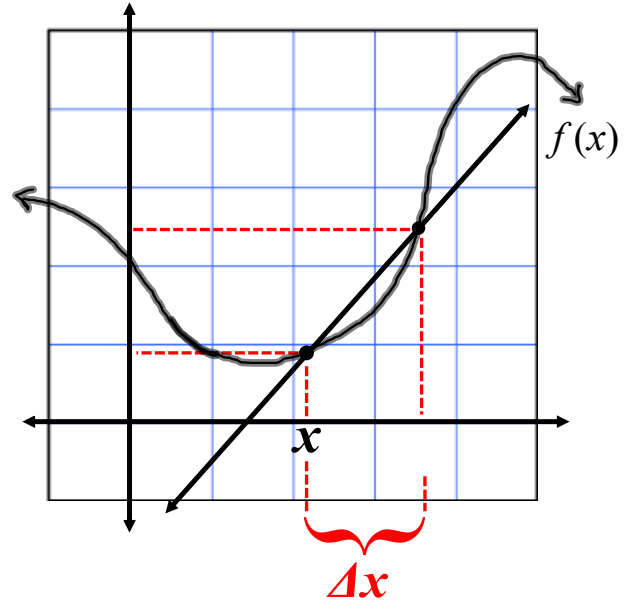
# Calculus AB

2-1

## Definition of the Derivative

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Show and explain how to find the slope of the secant line shown. Fill in the graph appropriately with all necessary details.



Once we have the slope of a secant line, how can we use this to find the slope of the tangent?

### Definition of Derivative -

What does the Derivative do?

Find the slope of the tangent line to the graph of the function at the specified point.

old book 5)  $f(x) = 3 - 2x$ ,  $(-1, 5)$

(pg. 104)

Find the derivative by the limit process.

20)  $f(x) = x^3 + x^2$

<sup>old</sup><sub>book</sub> 11)  $f(x) = 3$

<sup>old</sup><sub>book</sub> 23)  $f(x) = \sqrt{x + 1}$

Assignment:

Pg. 103

1, 5 - 19 odd,

22, 24