Calculus AB

2-1
Derivatives -
A Graphical Approach

Definition of Derivative - $\lim_{\Delta x \to 0} \dfrac{F(x+\Delta x) - F(x)}{\Delta x}$
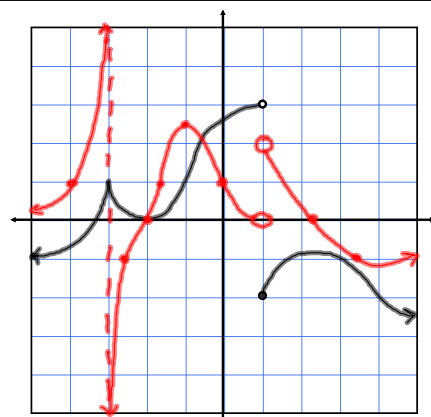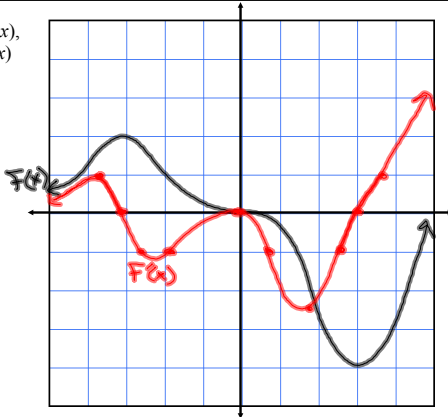
In plain English, what exactly does the Derivative do?

A Function that Finds the slope of a tangent line at each x

Compare a function $f(x)$ and its derivative $f'(x)$,

(x, y)   (x, m)

$f(x) \rightarrow$ input: __x__ $f'(x) \rightarrow$ input: __x__

output: _F(x)_ y   output: __m__

Using the graph of $f(x)$,
draw the graph of $f'(x)$

Complete the Graphing Worksheet.

For each, draw the graph of the
derivative to the given functions.