**12.3 The Tangent Line Problem**

**Objective: Find Derivatives of functions and find slopes of graphs.**

**Definition of Derivative**

The derivative of f at x is given by

provided this limit exists.

Example:

*Find the derivative and use it to identify the slope of the tangent through the given point.*

*The derivative is 6x-6*

*The slope of the tangent through (2,0) is at f’(2)=6*

**Homework:**

**Pg 878 #9, 10, 17**