# Chapter 11 – 2a Derivatives of Exponential and Logarithmic Functions

## Derivative of ex and ecx

In general,

**Example 1.** Find the derivative of

**Example 2.** Find the equation of the line tangent to the graph of at x = 1.

**Example 3.** Find the equation of the line tangent to the graph of at x = 0.



## Derivative of f(x)=ln x

**Example 4.** Find the derivative of

**Example 5.** Find the equation of the line tangent to the graph of at x =5.

**Example 6.** Find the derivative of

**Example 7.** Find the derivative of

**Example 8.** Find the derivative of

**Example 9.** Find the derivative of

**Example 10.** Find the derivative of