**Calculus Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_**

**HW 16: Unit 3.1 – Write the Equations of the Secant, Tangent & Normal Lines**

1. **Given **
2. Find the equation of the secant line between those points on the graph of $f$ for which $x=3$ and $x=4$.
3. Find the derivative .
4. Find the equation of the *Tangent* & *Normal* lines to the graph of $f$ at $x=1$.

Tangent Line:

Normal Line:

1. **Given **
2. Find the equation of the secant line between those points on the graph of $f$ for which $x=1$ and $x=2$.
3. Find the derivative.
4. Find the equation of the *Tangent* & *Normal* lines to the graph of $f$ at $x=3$.

Tangent Line:

Normal Line:

1. **Given:**

a. Find the equation of the Secant Line between the points x = 0 and x = 2.

b. Find the derivative f '(x).

c. Find the equations of the tangent & normal lines at x = 1.

Tangent Line:

Normal Line: