Name:_____ Date:_____

AP Calc AB: Practice with Derivative Definition Ms. Loughran

1. Given $f(x) = x^2 + 4x + 9,$ find the equation of the tangent line drawn to $f(x)$ at $x = 1.$

2. Given $g(x) = 2x^2 - 3x + 5,$ find the equation of the normal line drawn to $g(x)$ at $x = 1.$

3. Given $f(x) = -x^2 + 2x - 3,$ find the equation of the tangent line drawn to $f(x)$ at $x = 2.$