

Name:

Quiz 3

1. (5 points) Using the definition of the derivative to evaluate the derivative of  $f(x) = 8x^2 + 1$ .

2. (5 points) Find the derivate of  $f(x) = (x^2 + x + 1)(\sqrt{x} - x)$

3. (10 points) for the function  $f(x) = 3x^2$

1. Find  $f'(x)$

2. find the equation of the tangent line to  $f(x)$  at the point  $x = 3$