

NAME:

Math 105 - Quiz 5 - September 28, 2007

Instructions: Show all of your work and circle your final answers. Calculators are allowed, but notes and books are not.

1. (10 pts.) Let $f(x) = x^2 - 4$. Using the limit definition of the derivative, find $f'(3)$.

2. (10 pts.) Let $g(x) = 4x^2 - 2\sqrt{x}$.

(a) Find $g'(x)$. (You do not need to use the limit definition of the derivative.)

(b) Find the equation of the tangent line to the graph of $y = g(x)$ at $x = 1$.