Quiz 3, Business Calculus

Summer Session I, 2012

Name: _____

1. (4 points) Use the limit definition of the derivative to find $f'(x)$ if $f(x) = x^2 - 2$. You can use the power rule to check your work, but you will not receive full credit unless you show your work using the limit definition.

2. (3 points) Find $f'(x)$ if $f(x) = \dfrac{x^3 + 7}{x^2 + 1}$. Simplify your answer by combining like terms in the numerator (if they exist).

3. (3 points) Find $f'(x)$ if $f(x) = (x^7 + 2x^2 + 3)^{10}$. You do not need to simplify your answer.