Analytic Geometry and Calculus I
Quiz 3.3
Due Thursday

Name_____

Show all work necessary for your answers.

1. Solve the following equation for x: $3 \cdot 2^{1-5x} + 8 = 26$.

2. Solve the following equation for x: $\log_2(x+3) = 2\log_2(x) + 1$

3. Find $\frac{dy}{dx}$ for each of the following: (a) $y = xe^{\tan(x)} + \dfrac{\ln(x^2+1)}{x^2+1}$ (b) $y = x^{\tan(x)}$