Calculus and Analytic Geometry I
Quiz 4.1
Due on Tuesday
Name_____

1. Compute the following by first expressing $\tanh(x)$ in terms of e^x and e^{-x}.
   a. $\tanh(\ln(2))$

   b. $\lim_{x\to\infty} \tanh(x)$

2. Compute the derivative of the function $f(x) = \tanh^4(x^2 \cdot \ln(x))$.

3. Compute the following limits:
   a. $\lim_{x\to 0^+} (\sin(x))^{1/x}$

   b. $\lim_{x\to 0^+} (\cos(x))^{1/x}$