Quiz8

December 1, 2006 Name:

Note:Each problem is worth 25 points,so the maximum grade you can get is 100 points. *Good Luck!!*

(1)Sketch the graph of $g(x) = e^{-x} - 4$ by starting from the graph of e^x. Find the domain and range of $g(x)$.

(2)Sketch the graph of $f(x) = \ln(x + 2) - 1$ by starting from the graph of $\ln x$. Find the domain and range of $f(x)$.

(3)Expand the expression $\log(\frac{10^x}{x(x^2+1)(x^4+2)})$ into simple logarithms.

(4)Given $f(x) = 2 - \ln(1 - x)$, find the x- and y-intercept of this function.