QUIZ 5
Math 220-51

NetID:

November 5, 2009

(Please don't put your name!)

Question 1. *(16pts)*

(a) Find $\lim\limits_{x\to\infty} \dfrac{\ln(2x)}{\ln(x)}$.

(b) Find $\lim\limits_{x\to 2^+} \dfrac{1+x}{2-x}$.

(c) Find $\lim\limits_{t\to 0} \dfrac{t^3 + t^2}{(\cos t) - 1}$.

(d) Find $\lim\limits_{x\to 0} (5x + 1)^{1/x}$.

Question 2. *(9pts) Find where $f(x) = 2x + \dfrac{8}{x}$ has an absolute minimum and an absolute maximum on the closed interval $[1, 4]$. (You should give the x-values.)*