

MATH 234 FALL 2007 QUIZ #3 (9 AM)

SEPTEMBER 11TH, 2007

*Show your work.*

**Problem 1.** *Explain, in your own words, what a limit is **intuitively**.*

**Problem 2.** *Evaluate the following limits.*

- (1)  $\lim_{x \rightarrow 0} \frac{x(x+1)}{x^2+1}$
- (2)  $\lim_{x \rightarrow \infty} \frac{x^4+1}{8-x^3}$
- (3)  $\lim_{x \rightarrow \infty} \frac{1-\sqrt{x}}{1+\sqrt{x}}$