

PRINT NAME: _____

Student ID#: _____

Mathematics 2200 - Quiz Two
Friday, June 15, 2001

Show all your work and justify each step by citing the appropriate limit law. You may use your note or text book, but **NO** calculator.

1. Evaluate the limit $\lim_{x \rightarrow 0} \frac{\sqrt{1+x} - \sqrt{1-x}}{x}$.

2. Find the trigonometric limit $\lim_{x \rightarrow 0} \frac{1 - \cos 3x}{x^2}$.

3. Find the trigonometric limit $\lim_{x \rightarrow 0} \frac{\sin x - \tan x}{x^3}$.

4. Find the limit $\lim_{x \rightarrow 0^-} \frac{x}{x - |x|}$