

## MAT 170 Section 005

October 28, 2005

Names \_\_\_\_\_

Please work in groups with no more than four people and complete this worksheet during class. Hand in one worksheet for each group.

Evaluate the following limits.

1.  $\lim_{x \rightarrow \pi/2} \frac{1 - \sin x}{\cos x}$ .

2.  $\lim_{x \rightarrow 0} \frac{e^x - 1}{x^3}$ .

3.  $\lim_{x \rightarrow \infty} \frac{x}{e^x}$ .

4.  $\lim_{x \rightarrow 0} \frac{e^x}{x^2}$ .

5.  $\lim_{x \rightarrow 0^+} \frac{\ln x}{\csc x}$ .

6.  $\lim_{x \rightarrow 0} \frac{1 - \cos x}{x^2}$ .