Instructions. Put your first and last name at the top of your paper. Everyone is to do their own worksheet but only one from each group is graded with the score shared. Be sure to show your work and explain your reasoning. All worksheets from each group will be collected. This worksheet has two sides

Find the limit using L’Hospital’s Rule if appropriate If L’Hospital’s Rule does not apply, say “Does not apply”, and explain why. Then compute the limit using using an appropriate method.

1. \[
\lim_{{x \to \infty}} \frac{\ln \sqrt{x}}{x^2}
\]

2. \[
\lim_{{\theta \to \pi/2}} \frac{1 - \sin \theta}{\csc \theta}
\]
3. \[ \lim_{x \to 0} \frac{\cos mx - \cos nx}{x^2} \]

4. \[ \lim_{x \to 0} (\tan 2x)^x \]