

Name _____

Homework 18
Section 4.7

1. (4) Evaluate the limit: $\lim_{x \rightarrow \infty} \frac{\ln(x^2)}{3x^2}$

2. (4) Evaluate $\lim_{x \rightarrow 0} \frac{x^2}{\cos(\pi x)}$

3. (6) Calculate $\lim_{x \rightarrow 1} \left(\frac{1}{\ln(x)} - \frac{1}{x-1} \right)$

4. (6) Determine $\lim_{x \rightarrow 0^+} (1-x)^{1/x}$