

Name \_\_\_\_\_

Homework 29  
section 4.7

1. (10) Evaluate  $\lim_{x \rightarrow 0} \frac{\cos(mx) - \cos(nx)}{x^2}$ .

2. (10) Calculate  $\lim_{x \rightarrow 1} \left( \frac{1}{\ln(x)} - \frac{1}{x-1} \right)$ . Hint: rewrite the expression.