$\begin{array}{c} \textit{University of Lethbridge} \\ \text{Department of Mathematics and Computer Science} \\ \textbf{MATH 1565 - Tutorial } \#2 \end{array}$

Print your name and student number clearly in the space above.

Complete the problems on the back of this page to the best of your ability. If there is a problem you especially desire feedback on, please indicate this.

It is recommended that you work out the details on scrap paper before writing your solutions on this page.

1. Evaluate the limit $\lim_{t\to 0} \frac{1-\cos(5t)}{\sin^2(3t)}$.

2. Evaluate the limit $\lim_{x\to 2} \frac{x^3-8}{x^4-16}$.

3. Evaluate the limit $\lim_{x \to -\infty} \frac{\sqrt{x^2 + 2}}{3x - 4}$.