University of Lethbridge
Department of Mathematics and Computer Science
MATH 1565 - Tutorial #5

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.

Determine $f'(x)$ for the following functions:

1. $f(x) = x^{38} + 4\ln(x) - 3e^x + \pi^{3000}$.

2. $f(x) = x^5 e^x \tan(x)$.

3. $f(x) = \cot(x)$. (Write $\cot(x) = \dfrac{\cos(x)}{\sin(x)}$ and use the quotient rule.)

4. $f(x) = \cos(e^x + 13x^{11} - \sin(x))$.