

University of Lethbridge
Department of Mathematics and Computer Science
MATH 1565 - Quiz #1

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. For full marks, provide complete details.

1. Determine the following:

[2] (a) $\sin^{-1}\left(-\frac{1}{\sqrt{2}}\right)$

[2] (b) $\cos^{-1}\left(\frac{\sqrt{3}}{2}\right)$

[2] (c) $\tan^{-1}\left(\tan\left(\frac{3\pi}{4}\right)\right)$

[3] 2. (a) Show that $\cosh(-x) = \cosh(x)$ for all $x \in \mathbb{R}$.

[1] (b) What are the domain and range of $\tanh(x)$?