

**MTH 32. QUIZ 2. NAME:**\_\_\_\_\_

[4] **1.** Find the exact value of

a)  $\csc^{-1}\sqrt{2}$

b)  $\cos^{-1}(\sqrt{3}/2)$

[4] **2.** Find the derivative of the function  $f(x) = x \sin^{-1}x + \sqrt{1 - x^2}$ .

[4] **3.** Simplify the expression  $\sin(\tan^{-1}x)$ .