$\underset{\text{June 21, 2018}}{\text{Math 1220-003 Quiz 3}}$

You have until the next class to complete this quiz. Make sure to write your name at the top of the quiz. This quiz is two questions, worth 20 points.

- 1. (10 points) Find exact values for the following:
 - (a) $tan^{-1}(1)$

(b) $\sin(\sin^{-1}(\sqrt{2}-1))$

(c) $\tan^{-1} \left(\tan \left(\frac{5\pi}{6} \right) \right)$

(d) $\sin\left(2\cos^{-1}\left(\frac{1}{2}\right)\right)$

2. (10 points) Evaluate the following integral: $\int \frac{1}{\sqrt{3-2x-x^2}} dx$.