Math 130 - Quiz 5 IC

Name _____

September 25, 2019

Score _____

Show all work to receive full credit. Supply explanations when necessary. You must work individually on this quiz. Do not use a calculator for any part of this quiz.

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1. (3 points) Use your knowledge of the values of the trig functions at special angles to determine the exact value of each of the following.

   (a) $\tan^{-1}(1)$

   (b) $\arcsin\left(\frac{\sqrt{3}}{2}\right)$

   (c) $\cos^{-1}(0)$

2. (1 point) Because the sine and arcsine functions are inverses, Steve thought that it must be true that $\sin(\sin^{-1}(2)) = 2$. Is Steve correct? Explain why or why not.

3. (1 point) Determine the value of $\cos^{-1}(\cos 3\pi)$.

Math 130 - Quiz 5 TH

Name _____

September 25, 2019

Score _____

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1. (1 point) Determine the exact value of $\arcsin[\sin(9\pi/4)]$.

2. (3 points) Use a right triangle to find the exact value of $\sin(\cos^{-1}\sqrt{5})$.

3. (3 points) Use a right triangle to find the exact value of $\tan[\cos^{-1}(-2/3)]$.

4. (3 points) Use a right triangle to determine an algebraic expression for $\sec[\arctan(3x)]$.