Quiz 8 Key — MA161 — September 26, 2018

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Min	Mean	Max
3	15	20

1. (9 points) Determine whether each of these equations is true or false:

   (a) $\sin^{-1}\left(\sin\left(\frac{2\pi}{3}\right)\right) = \frac{2\pi}{3}$

   (b) $\cos^{-1}\left(\cos\left(\frac{2\pi}{3}\right)\right) = \frac{2\pi}{3}$

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

   (a) False (b) True (c) False

   Note: This problem appeared on the second midterm exam in the fall of 2017.

2. (11 points) If $y = \sqrt{\sin 3x}$ find y'.

   $$\frac{3\cos 3x}{2\sqrt{\sin 3x}}$$

   Note: This problem appeared on the second midterm exam in the fall of 2016