

Name: _____

Math 151-01 Calculus I – Crawford

Quiz 2-A

03 October 2017

Books, notes (in any form), and calculators are not allowed. *Show all your work.* Good Luck!

1. (3 pts) If $\tan \theta = -6$ and $\frac{3\pi}{2} \leq \theta \leq 2\pi$, use a right triangle to determine $\cos \theta$.

2. (4 pts) Find all solutions to the following equation.

$$\sin^2 x = \sin x$$

3. (4 pts) Find an equation of the tangent line to $y = 3 \cos x + 2 \sin x$ at $(\pi, -3)$.

4. (4 pts) Differentiate the following.

[Do not simplify.]

$$y = \left(\frac{\tan(3x)}{4x^3 + 2x - 3} \right)^5$$