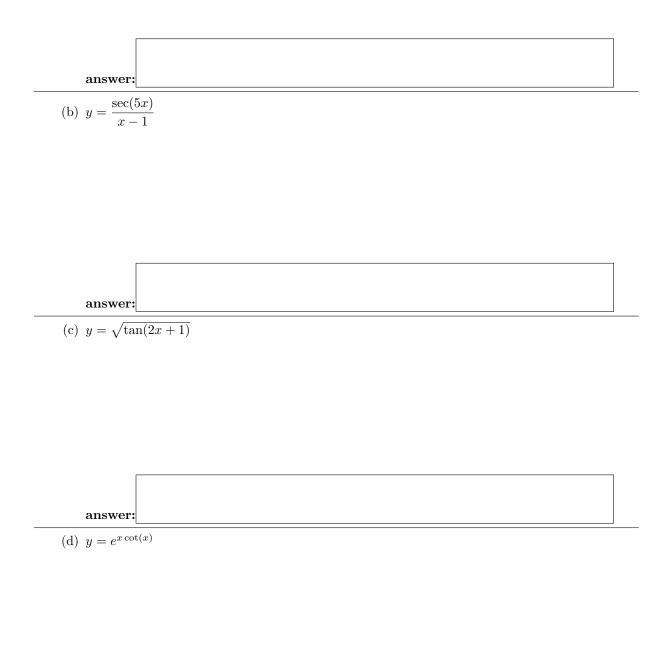Math 201 - Quiz #4   Name: _____

1. **Solve two of the following parts. Please put an X through the parts you do not want graded**. Compute the derivative for each of the following. Full simplification is not necessary, but your final answer should not have any derivatives.

   (a) $f(x) = 3\cos(x) + \sin(3x^7 - 1)$

   answer: ⎡_____⎤

   (b) $y = \dfrac{\sec(5x)}{x - 1}$

   answer: ⎡_____⎤

   (c) $y = \sqrt{\tan(2x + 1)}$

   answer: ⎡_____⎤

   (d) $y = e^{x\cot(x)}$

   answer: ⎡_____⎤

2. Find $\frac{dy}{dx}$ of the eqation $x^2 + xy + y^2 = \sin^2(x)$ using implicit differentiation.

answer: