

Name _____ Date _____

Instructions: Please show all of your work as partial credit will be given where appropriate, **and** there may be no credit given for problems where there is no work shown. All answers should be completely simplified, unless otherwise stated.

NOTE – Quiz is continued on the other side of the page.

1. Find y' for the following functions. **(Do NOT bother simplifying.)**

(a) $y = \frac{\cos x - \sin x}{4 \tan x}$

Answer 1(a): _____

(b) $y = (\csc x + 2 \cot x)(x^{-4} + 2x^3 - 6x)$

Answer 1(b): _____

2. Find $D_x y$ for $y = \sin(3x^2)$ (Do not bother to simplify.)

Answer 2: _____

3. Find $\frac{dy}{dx}$ for $y = \left(\frac{x^4 - 3x}{\sin x} \right)^2$ (Do not bother to simplify.)

Answer 3: _____

4. Find $f''(x)$ for $f(x) = \frac{-3}{2x+1}$

Answer 4: _____