

March 29, 2015

QUIZ#3 Math101-sec 8.

Net Time Allowed: 35 minutes

Name:

ID # :

Serial #:

Exercise1:(05 points)

If  $z = \sqrt[3]{u(u+1)}$  and  $u = \frac{x}{x-1}$ . Find  $\frac{dz}{dx}|_{x=2}$

Exercise2:(05 points)

If  $x^2 = y^2 + \cos(xy)$ , then find  $\frac{dy}{dx}$ .

Exercise3:(05 points)

Find the tangent line to the graph of the curve  $y = \ln\left(\frac{\sqrt{\tan(2x)}}{1+\sec(2x)}\right)$  at  $x = \frac{\pi}{6}$ .