

QUIZ 3 FOR CALC4 ON FEB. 26, 2014

Name: _____ RUID: _____

Email: _____

(1) (10 pt) Find out the maximal interval where for the initial value problem

$$\begin{cases} ty' + \frac{2t-1}{t^2-4}y = \frac{3t-5}{2t+1} \\ y(1) = 0 \end{cases}$$

there exists a unique solution.

(2) (10 pt) Find the equilibrium of the differential equation

$$y' = y^2(y^2 - 5y + 6)$$

and determine the stability.