

QUIZ 1 FOR CALC4 ON FEB. 2, 2015

Name: \_\_\_\_\_ RUID: \_\_\_\_\_

Email: \_\_\_\_\_

1. (5 pt) Solve the initial value problem

$$y' = x(x^2 + 1)/4y^3, y(0) = -1/\sqrt{2}$$

and determine the interval in which the solution is defined.

2. (5 pt) The Peskin Loan is one type of Federal Student Loans for college students with annual interest 5% *compounded continuously*. To pay his tuition, Mr. Qi *borrowed continuously* at a rate of \$20,000/yr. When he graduates after 4 years in college, how much debt does Mr. Qi carry?