Quiz 3 for Calc 4 on Sept. 18, 2014
Name(PRINT!): RUID:

## Email(PRINT!):

$\qquad$
(1) Find the solution of the following initial value problem IN EXPLICIT FORM

$$
y^{2}\left(1-x^{2}\right)^{1 / 2} d y=\arcsin x d x, y(0)=1
$$

(2) Can you conclude if the following initial value problem

$$
y^{\prime}(t)=\sqrt{y+t-1}, y(0)=1
$$

has a unique solution on some interval around the initial time $t=0$ ?

