

Name [1 Pt]: \_\_\_\_\_ Quiz Score: \_\_\_\_\_/(4+1)

Answer all questions. Show all work, and carefully explain your reasoning.

- 2 1. Find the general solution of the ODE

$$ty' + 2y = t^2.$$

**Solution:**

- 2 2. Find the general solution of the following ODE. Leave your answer as an implicit function of  $y$ .

$$\frac{dy}{dx} = \frac{x}{x^2y^2 + 3y^2}.$$

**Solution:**