

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

Math 211 Quiz 11

Section: 322

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Dec 13, 2012

- 1.** (10 pts) Find the solution of the differential equation that satisfies the given initial condition.

**a.**  $\frac{dy}{dx} = -\frac{x}{y}, \quad y(0) = 1$       **b.**  $y' = -2xy, \quad y(0) = 1$

- 2.** (10 pts) Evaluate the improper integral.

**a.**  $\int_0^\infty e^{-0.05t} dt$

**b.**  $\int_{-\infty}^{-1} \frac{1}{x^2} dx$