

Quiz # 1– Math 2233, Differential Equations – Sept. 8, 2014

1. (5 pts) Find the general solution to

$$\frac{dy}{dx} = \frac{e^{-x} - e^x}{3 + 4y}$$

2. (5 pts) Determine an interval in which the solution is certain to exist:

$$\begin{cases} (t - 4)y' + ty = 2 \ln t \\ y(3) = 2 \end{cases}$$