

ATTENDENCE QUIZ FOR CALC 4 ON JAN. 27, 2015

1. Draw the direction field of

$$y' = \sin y$$

Compare to the direction field you have drawn in the homework, decide if this is a linear ODE.

2. Find the general solution of the following ODE

$$ty' + (t - 1)y = -e^{-t}$$

3. Try to solve the IVP

$$\begin{cases} ty' + (t - 1)y = -e^{-t} \\ y(\ln 2) = 1/2 \end{cases} \quad \text{and} \quad \begin{cases} ty' + (t - 1)y = -e^{-t} \\ y(0) = 1 \end{cases}$$

How to understand your solution to the second one.