M 327J - Differential Equations with Linear Algebra

August 29, 2022

Quiz 1

1. [4 points] Find the general solution to

$$\frac{dy}{dt} + \frac{1}{t}y = t.$$

2. [3 points] Find the particular solution to

$$\frac{dy}{dt} + ty = 0 \quad y(0) = 1.$$

3. [3 points] Find the general solution to

$$\frac{dy}{dt} = 2ty^2.$$