1. Consider the differential equation \( \frac{dy}{dt} + 3y = 4e^{-5t} \)

a. List all terms/terminology that apply to this equation.

b. Give the general solution of this equation.
c. Find the particular solution to this equation that satisfies the initial condition $y(0) = 1$

d. Describe the long term behavior of this solution.

Self evaluation: (Circle) Rate your level of understanding of the material on the quiz:

Mastery   Developing   Not Yet