Quiz 3 Math 3600 Show your work
Oct. 14, 2016

1.) Suppose $y = c_1e^{3t} + c_2te^{3t} + 4t^2e^{3t}$ is a solution to $y'' - 6y' + 9y = 8e^{3t}$. Find the solution to the initial value problem:

$$y'' - 6y' + 9y = 8e^{3t} + 27t, \quad y(0) = 5, \quad y'(0) = 2.$$

Note: Solving this IVP is a 4 part problem, but I have already done the first two parts for you.

Answer: _____