

**Quiz # 3**– Math 2233, Differential Equations – Oct. 8, 2014

1. (5 pts) Solve the following initial value problem:

$$\begin{cases} y'' - 6y' + 9y = 0, \\ y(0) = 0, \quad y'(0) = 2 \end{cases}$$

2. (5 pts) Find a proper form of  $Y$  for

$$y'' + 3y' = 2t^4 + e^t \sin 3t$$