1. Find the appropriate form using the Method of Undetermined Coefficients for a particular solution to the following. Do not solve for the unknown constants.

   (a) $y'' - 2y' + y = t^2 e^t$

   (b) $y'' - 2y' + y = te^{2t} + 3e^{4t}$

   (c) $y'' - 2y' + y = te^t \cos 2t$

2. Find the general solution for

   $y'' - 3y' + 2y = (12t + 8)e^{-t}$