Turn these problems in with the assigned problems from the text:

(1) Solve the non-homogeneous system:
$$Y' = \begin{bmatrix} 2 & 2 \\ 1 & 3 \end{bmatrix} Y + \begin{bmatrix} 3e^x \\ 0 \end{bmatrix}.$$

(Optional) Bonus Problems: For each problem that you solve correctly I will increase your homework score by one point. All or nothing for these − no partial credit.