

Quiz No. 6, Math 202. ID _____ Name _____ Sec _____

Q1. Use variation of parameter method to solve the system $X' = \begin{pmatrix} -3 & 1 \\ 2 & -4 \end{pmatrix} X + \begin{pmatrix} 3t \\ e^{-t} \end{pmatrix}$ on $(-\infty, \infty)$.

Q2. Use matrix exponential to find the general solution of the $X' = \begin{pmatrix} 1 & 0 \\ 0 & 2 \end{pmatrix} X$