KFUPM/ Department of Mathematics & Statistics ID #: Serial #:
MATH 202-04/ Quiz 4/ 163 Name:

1. Find a general solution of the system $X' = AX$ where $A = \begin{pmatrix} 2 & 0 & 0 \\ 2 & 0 & 2 \\ 1 & -1 & 3 \end{pmatrix}$.

2. Use variation of parameters to solve the nonhomogeneous system: $X' = AX + \begin{pmatrix} 3 \\ 3 \end{pmatrix}$ where $A = \begin{pmatrix} -1 & -2 \\ 3 & 4 \end{pmatrix}$.