

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 260 (111) - Quiz II

Name: _____ ID: _____ Serial No.: _____

1. If A is a nonsingular matrix. Show that $(A^T)^{-1} = (A^{-1})^T$.

2A. Find the inverse of $A = \begin{bmatrix} 1 & 1 & 1 \\ 1 & 2 & 3 \\ 0 & 1 & 1 \end{bmatrix}$

2B. Use part 2a to solve the linear system $\begin{bmatrix} 1 & 1 & 1 \\ 1 & 2 & 3 \\ 0 & 1 & 1 \end{bmatrix} \begin{bmatrix} x_1 & y_1 \\ x_2 & y_2 \\ x_3 & y_3 \end{bmatrix} = \begin{bmatrix} 0 & 1 \\ -1 & 2 \\ 1 & 0 \end{bmatrix}$