

Engineering Mathematics I---Quiz-9

Dec. 28, 2005

$$1) A = \begin{bmatrix} 0 & 2 & 4 & 0 \\ 1 & 2 & -2 & 3 \\ 5 & 1 & 0 & -1 \\ 1 & 1 & 1 & 2 \end{bmatrix} \quad \text{a) } M_{33} \quad \text{b) } C_{34}$$

$$2) A = \begin{bmatrix} 1 & 1 & -3 & 0 \\ 1 & 5 & 3 & 2 \\ 1 & -2 & 1 & 0 \\ 4 & 8 & 0 & 0 \end{bmatrix} \quad \det(A) = ?$$

3) Use either Gaussian elimination or Gauss-Jordan elimination to solve the given

$$\text{system. a) } \begin{cases} x_1 - x_2 = 11 \\ 4x_1 + 3x_2 = -5 \end{cases} \quad \text{b) } \begin{cases} x_1 + 2x_2 + 2x_3 = 2 \\ x_1 + x_2 + x_3 = 0 \\ x_1 - 3x_2 - x_3 = 0 \end{cases}$$