

QUIZ NUMBER FIVE FOR MTH 221 AT 2:00

AYMAN BADAWI

Name \_\_\_\_\_, Id. Num. \_\_\_\_\_, Score  $\frac{\quad}{15}$

**QUESTION 1.** Let  $A = \begin{bmatrix} 1 & -1 & 1 & -1 \\ -1 & -1 & 1 & 1 \\ -3 & 3 & 4 & 3 \\ 0 & 0 & -3 & 4 \end{bmatrix}$  Find  $\det(A)$ .

**QUESTION 2.** Given  $A$  is a  $4 \times 4$  such that

$A \quad \underline{3R_2} \quad C \quad \underline{R_3 \leftrightarrow R_4} \quad D \quad \underline{3R_2 + R_4 \rightarrow R_4}$   $\begin{bmatrix} -1 & -1 & 1 & -1 \\ 0 & -5 & 1 & 1 \\ 0 & 0 & 4 & 3 \\ 0 & 0 & 0 & -2 \end{bmatrix}$  Find  $\det(A)$

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