

QUIZ NUMBER THREE FOR MTH 221 AT 2 PM

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

**QUESTION 1.** Let  $A = \begin{bmatrix} -6 & 4 & 8 \\ 2 & 2 & 8 \\ -3 & -3 & 10 \end{bmatrix}$ . Find a symmetric matrix  $K$  and a skew-symmetric matrix  $F$  so that  $A = K + F$ .

**QUESTION 2.** Let  $A = \begin{bmatrix} -6 & -6 & 7 \\ 0 & 3 & 0 \\ 1 & 0 & -1 \end{bmatrix}$ . If possible find  $A^{-1}$ .

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