February 4, 2010

Last Name: _____

First Name: _____

Student ID: _____

Quiz 2 (A)

Question 1. *(5 marks)* Solve the following system of equations using Gauss-Jordan elimination:

$$\begin{array}{rcrcrcrcl} 2x_1 & + & 4x_2 & & & + & 2x_4 & = & 6 \\ x_1 & + & 2x_2 & - & x_3 & & & = & 1 \\ -2x_1 & - & 4x_2 & + & 2x_3 & & & = & -2 \end{array}$$

Question 2. *(2 marks)* Given:

$$A = \begin{bmatrix} -2 & 1 \\ 1 & 0 \end{bmatrix} \qquad B = \begin{bmatrix} 1 & -2 \\ 4 & 1 \\ 7 & 0 \end{bmatrix} \qquad C = \begin{bmatrix} 0 & 1 & -3 \\ 1 & 0 & 4 \end{bmatrix}$$

Compute $3B^T - AC$ if possible.