Assignment 7

Due Tueday, Dec 12, 06 at 1:00 PM in Class

Remarks: I may not grade all assignments, and not all questions/parts will be graded on the graded assignment. You're welcome to ask me for help. Show your work and explain every step.

Let

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 7 \\ 3 & 6 & 0 \end{bmatrix}.$$

(1) Find $(2A - 3I)^T$.
(2) Find A^2.
(3) Find $\det(A)$.
(4) Find A^{-1}.
(5) Use A^{-1} to find the solution of the system (do not use substitution or elimination):
$x_1 + 2x_2 + 3x_3 = -1.$
$4x_1 + 5x_2 + 7x_3 = -2.$
$3x_1 + 6x_2 = -3.$