MATH 3306
Quiz 7.2

Consider the following matrices

$$A = \begin{pmatrix} 1 & -1 & 3 \\ 2 & 4 & -1 \end{pmatrix}, \quad B = \begin{pmatrix} 3 & 2 & 1 \\ 0 & 1 & -3 \end{pmatrix}, \quad C = \begin{pmatrix} 2 & 1 & 2 \\ 1 & 2 & 1 \\ 3 & 0 & -1 \end{pmatrix}.$$

(1) Find $3A - B$ if it exists or explain why it does not exist.

(2) Find CA^T if it exists or explain why it does not exist.

(3) Use technology to find C^{-1}, the inverse of matrix C if it exists or explain why it does not exist.