

$$AB^T + C^{-1}?$$

$$B^T = \begin{pmatrix} -2 & 0 \\ 0 & -1 \\ 5 & 4 \end{pmatrix}$$

$$C^{-1} = \begin{pmatrix} 1 & 0 \\ 0 & 1/2 \end{pmatrix}$$

$$AB^T = \begin{pmatrix} -17 & -16 \\ 11 & 13 \end{pmatrix}$$

$$AB^T + C^{-1} = \begin{pmatrix} -16 & -16 \\ 11 & 13/2 \end{pmatrix}$$