August 14 - PM

1. Find the least-squares solutions of $Ax = b$ where

$$A = \begin{pmatrix} 0 & 1 \\ 1 & 1 \\ 2 & 1 \end{pmatrix} \qquad b = \begin{pmatrix} 6 \\ 0 \\ 0 \end{pmatrix}$$

2. Find the least-squares solutions of $Ax = b$ where

$$A = \begin{pmatrix} 2 & 0 \\ -1 & 1 \\ 0 & 2 \end{pmatrix} \qquad b = \begin{pmatrix} 1 \\ 0 \\ -1 \end{pmatrix}$$

3. Find the least-squares solutions of $Ax = b$ where

$$A = \begin{pmatrix} 2 & -2 \\ -2 & 2 \\ 5 & 3 \end{pmatrix} \qquad b = \begin{pmatrix} -1 \\ 7 \\ -26 \end{pmatrix}$$