Worksheet - Lecture 11
Least Squares

For the following problems you may use software or an online matrix inverse calculator to compute any matrix inverse required. One option can be found here:


1. Find the least squares solution to following inconsistent system:

\[
\begin{pmatrix}
2 & -2 \\
-2 & 2 \\
5 & 3
\end{pmatrix}
\begin{pmatrix}
\beta_1 \\
\beta_2
\end{pmatrix}
= 
\begin{pmatrix}
-1 \\
7 \\
-26
\end{pmatrix}
\]

2. Use the method of least squares to find the regression equation associated with Problem 3 on Worksheet 5 (regarding SAT scores).