

Name:

1. Find all solutions to the matrix equation $A\mathbf{x} = \mathbf{0}$, where

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

2. Write down a 3×4 matrix whose columns span \mathbb{R}^3 .