

Group: _____ Present: _____

1. Consider the matrix

$$A = \begin{pmatrix} 3 & -2 & 1 \\ 2 & 4 & -1 \\ 6 & -20 & 7 \end{pmatrix}$$

Find all vectors which lie in the column space of A , that is, find the vectors B for which $AX = B$ has a solution.

How many parameters are in your description of the vectors B ?

Next find the null space of A , that is, solve the homogeneous linear system $AX = 0$.

How many parameters are in your description of the null space?