

QUIZ 7

Time: 10min

1. Find a basis for $Col A$ and $Nul A$:

$$A = \begin{bmatrix} 1 & 2 & 7 & -6 \\ 0 & 1 & 5 & -7 \\ 0 & 0 & 0 & 0 \end{bmatrix}.$$

What is the rank of A ? What is the nullity of A ?

10 points.

Bonus. (10 pts) Let A be a 3×4 matrix. Use the rank theorem to show that the homogenous system $Ax = 0$ has a nontrivial solution.