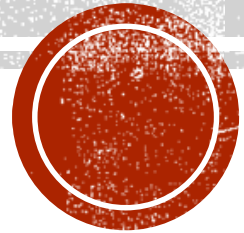
THE RANK OF A MATRIX & LINEAR SYSTEMS

Section 4.6



THEOREM

Let A be $m \times n$. Then

(1) $\text{Nul}(A)$ is a subspace of $\mathbb{R}^n$.

(2) $\text{Col}(A)$ is a subspace of $\mathbb{R}^m$.

(3) $\text{Row}(A)$ is a subspace of $\mathbb{R}^n$.