$$\mathcal{C}^{n}$$

$$\mathcal{N}(A) = \mathcal{N}(AA^{H})$$

$$\oplus$$

$$\dim(\mathcal{R}(A)) = \dim(\mathcal{R}(A^{H}))$$

$$\mathcal{R}(A^{H}) = \mathcal{R}(A^{H}A)$$