

EXERCISES

1. Let \mathcal{A} be a $n \times n$ matrix. Show that \mathcal{A} is invertible if and only if $\det \mathcal{A} \neq 0$.

2. Let \mathcal{A} be a $n \times n$ matrix. Show that $\mathcal{A}^{-1} = \frac{1}{\det \mathcal{A}} \text{adj}(\mathcal{A})$.

3. Let \mathcal{A} be a $n \times n$ matrix. Show that $\det \mathcal{A} = \det \mathcal{A}^T$.

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