

Matrix Determinant of Product

1 Why

TODO

2 Result

Proposition 1. The determinant of a product of two real matrices is the product of the determinant of each matrix.

Proof. Let $A \in \mathbb{R}^{n \times p}$ and $B \in \mathbb{R}^{p \times n}$. We want to show that

$$\det\left(AB\right) = \det\left(A\right)\det\left(B\right).$$

TODO