

## MATRIX DETERMINANT OF PRODUCT

Why

TODO

## Result

**Prop. 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

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

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<sup>&</sup>lt;sup>1</sup>Future editions will include a proof.

