

## Matrix Determinant Of Inverse

## 1 Why

## 2 Result

**Proposition 1.** The determinant of an invertible square real matrix is the multiplicative inverse of the determinant of the matrix.

*Proof.* Let  $A \in \mathbb{R}^{n \times n}$  be invertible. We want to show that

$$\det\left(A^{-1}\right)=\left(\det A\right)^{-1}.$$