



## 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  $A \in \mathbf{R}^{n \times n}$  be invertible. We want to show that

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

□