

MATH 162A Review: Einstein Convention

Facts to Know:

The definition of the Einstein Convention.

Examples:

1. Prove that for any inner product in \mathbb{R}^n there is a positive definite matrix A such that

$$\langle x, y \rangle = x^T A y.$$

2. Prove the associativity of matrix multiplication.

$$(AB)C = A(BC).$$