

1 Multilinear Maps

题目1. Elementary Layer Operations for Tensors

解答. 1.

解答. 2.

解答. 3.

解答. 4.

解答. 5.

题目2. Let M be a $3 \times 3 \times 3$ "3D matrix" whose (i, j, k) entry is $i + j + k$. We interpret this as a multilinear map $M : \mathbb{R}^3 \times \mathbb{R}^3 \times \mathbb{R}^3 \rightarrow \mathbb{R}$

解答. 1.

解答. 2.

解答. 3.

解答. 4.