

P1.1.2

In a conventional 2-by-2 matrix multiplication $C=AB$, there are eight multiplication. Make a table indicates the order that these multiplications are performed for the ijk , jik , kij , ikj , jki and kji matrix multiplication algorithms

$$a_{ik}b_{kj}$$

	ijk	jik	kij	ikj	jki	kji
$a_{11}b_{11}$	1	1	1	1	1	1
$a_{11}b_{12}$	3	5	2	2	5	3
$a_{21}b_{11}$	5	3	3	5	2	2
$a_{21}b_{12}$	7	7	4	6	6	4
$a_{12}b_{21}$	2	2	5	3	3	5
$a_{12}b_{22}$	4	6	6	4	7	7
$a_{22}b_{21}$	6	4	7	7	4	6
$a_{22}b_{22}$	8	8	8	8	8	8

Table 1: Results