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CS 2130

Program 9.2: Matrix Operations

Test Cases

4 -1 2 8	2 3 9 -3 3 7	1 -4 9 3 -8 2	3 8 3 -2 7 1 0 -1 8
A (2 x 2)	**B (2 x 3)**	**C (3 x 2)**	**D (3 x 3)**

First matrix (A, B, C, D) = 4 choices; Second matrix (A, B, C, D) = 4 choices; Multiply or add = 2 choices

*Total possibilities = 4 * 4 * 2 = 32*

Test #	First matrix	Second matrix	Add/Multiply	Result
1	A	A	A	8 -2 4 16
2	A	A	M	14 -12 24 62
3	A	B	A	Invalid operation
4	A	B	M	11 9 29 -20 30 74
5	A	C	A	Invalid operation
6	A	C	M	Invalid operation
7	A	D	A	Invalid operation
8	A	D	M	Invalid operation
9	B	A	A	Invalid operation
10	B	A	M	Invalid operation
11	B	B	A	4 6 18 -6 6 14
12	B	B	M	Invalid operation
13	B	C	A	Invalid operation
14	B	C	M	-43 19 -32 35
15	B	D	A	Invalid operation
16	B	D	M	0 28 81 -15 -10 50
17	C	A	A	Invalid operation

18	C	A	M	-4 -33 42 15 -28 24
19	C	B	A	Invalid operation
20	C	B	M	14 -9 -19 9 36 102 -22 -18 -58
21	C	C	A	2 -8 18 6 -16 4
22	C	C	M	Invalid operation
23	C	D	A	Invalid operation
24	C	D	M	Invalid operation
25	D	A	A	Invalid operation
26	D	A	M	Invalid operation
27	D	B	A	Invalid operation
28	D	B	M	Invalid operation
29	D	C	A	Invalid operation
30	D	C	M	51 18 53 31 -73 13
31	D	D	A	6 16 6 -4 14 2 0 -2 16
32	D	D	M	-7 77 41 -20 32 9 2 -15 63