



matrix RESHISH

Gauss-Jordan Elimination

Cramer's Rule

Inverse Matrix Method

Matrix Rank

Determinant

Inverse Matrix

Matrix Power

Matrix Transpose

Matrix Multiplication

Matrix Addition/Subtraction

Matrix Calculator Graphing Calculator

Result of matrix multiplication



Matrix A

Nº	A ₁	A ₂	A ₃	A ₄
1	1	1	1	1
2	1	-1	1	-1
3	1	1	-1	-1
4	1	-1	-1	1

Matrix B

Nº	B ₁	B ₂	B ₃	B ₄
1	1	1	2	1
2	2	1	1	2
3	1	3	2	1
4	2	1	2	1

$$c_{11} = 1 \times 1 + 1 \times 2 + 1 \times 1 + 1 \times 2 = 6$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0

$$c_{12} = 1 \times 1 + 1 \times 1 + 1 \times 3 + 1 \times 1 = 6$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0

$$c_{13} = 1 \times 2 + 1 \times 1 + 1 \times 2 + 1 \times 2 = 7$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	0

2	0	0	0	0
3	0	0	0	0
4	0	0	0	0

$$c_{14} = 1 \times 1 + 1 \times 2 + 1 \times 1 + 1 \times 1 = 5$$



Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0

$$c_{21} = 1 \times 1 + (-1) \times 2 + 1 \times 1 + (-1) \times 2 = -2$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	0	0	0
3	0	0	0	0
4	0	0	0	0

$$c_{22} = 1 \times 1 + (-1) \times 1 + 1 \times 3 + (-1) \times 1 = 2$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	0	0
3	0	0	0	0
4	0	0	0	0

$$c_{23} = 1 \times 2 + (-1) \times 1 + 1 \times 2 + (-1) \times 2 = 1$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	0
3	0	0	0	0
4	0	0	0	0

$$c_{24} = 1 \times 1 + (-1) \times 2 + 1 \times 1 + (-1) \times 1 = -1$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	-1
3	0	0	0	0
4	0	0	0	0

$$c_{31} = 1 \times 1 + 1 \times 2 + (-1) \times 1 + (-1) \times 2 = 0$$

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Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	-1
3	0	0	0	0
4	0	0	0	0

$$c_{32} = 1 \times 1 + 1 \times 1 + (-1) \times 3 + (-1) \times 1 = -2$$



Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	-1
3	0	-2	0	0
4	0	0	0	0

$$c_{33} = 1 \times 2 + 1 \times 1 + (-1) \times 2 + (-1) \times 2 = -1$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	-1
3	0	-2	-1	0
4	0	0	0	0

$$c_{34} = 1 \times 1 + 1 \times 2 + (-1) \times 1 + (-1) \times 1 = 1$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	-1
3	0	-2	-1	1
4	0	0	0	0

$$c_{41} = 1 \times 1 + (-1) \times 2 + (-1) \times 1 + 1 \times 2 = 0$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	-1
3	0	-2	-1	1
4	0	0	0	0

$$c_{42} = 1 \times 1 + (-1) \times 1 + (-1) \times 3 + 1 \times 1 = -2$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	-1
3	0	-2	-1	1
4	0	-2	0	0

$$c_{43} = 1 \times 2 + (-1) \times 1 + (-1) \times 2 + 1 \times 2 = 1$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	-1
3	0	-2	-1	1
4	0	-2	1	0



$$c_{44} = 1 \times 1 + (-1) \times 2 + (-1) \times 1 + 1 \times 1 = -1$$

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	-1
3	0	-2	-1	1
4	0	-2	1	-1

[Hide solution](#)

Result:

Nº	C ₁	C ₂	C ₃	C ₄
1	6	6	7	5
2	-2	2	1	-1
3	0	-2	-1	1
4	0	-2	1	-1



Computation time: 1.654 sec.