



## Matrix Calculator

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**Section: 1**

## 3x3 addition & subtraction

```
"D:\Sophomore\2nd semster\Programming\Project\MatrixCalc\bin\Debug\MatrixCalc.exe"
Please enter dimensions of Matrix A:
3 3
Please enter dimensions of Matrix B:
3 3
Please enter values of Matrix A:
24 51 -62
-22 32 45
12 -78 32
Please enter values of Matrix B:
22 -1 20
-22 4 -56
9 -55 7
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
1
46 50 -42
-44 36 -11
21 -133 39
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
2
2 52 -82
0 28 101
3 -23 25
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
```

## 3x3 multiplication

```
"D:\Sophomore\2nd semster\Programming\Project\MatrixCalc\bin\Debug\MatrixCalc.exe"
Please enter dimensions of Matrix A:
3 3
Please enter dimensions of Matrix B:
3 3
Please enter values of Matrix A:
55 98 -85
22 -56 -65
55 2 17
Please enter values of Matrix B:
34 42 22
3 65 -52
-4 -66 74
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
3
2504 14290 -10176
840 1574 -1414
1808 1318 2364
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
```

## YxZ multiplication

```
"D:\Sophomore\2nd semester\Programming\Project\MatrixCalc\bin\Debug\MatrixCalc.exe"
Please enter dimensions of Matrix A:
3 5
Please enter dimensions of Matrix B:
5 7
Please enter values of Matrix A:
54 99 78 52 21
15 -6 -65 -72 22
55 12 2 54 -6
Please enter values of Matrix B:
45 87 22 14 -96 21 22
-5 44 -77 -85 -74 -65 55
78 36 -66 21 33 -20 1
45 87 96 57 61 20 3
-11 37 -55 -65 65 33 99
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
3
10128 17163 -7746 -4422 -5399 -5128 8946
-7847 -6749 -3040 -6179 -6103 1291 1897
5067 9861 5668 3260 -3198 1217 1440
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
-
```

## Invalid YxZ multiplication

```
Select "D:\Sophomore\2nd semester\Programming\Project\MatrixCalc\bin\Debug\MatrixCalc.exe"
Please enter dimensions of Matrix A:
3 4
Please enter dimensions of Matrix B:
5 5
Please enter values of Matrix A:
33 21 1 45
21 32 11 4
12 33 44 7
Please enter values of Matrix B:
22 -8 77 55 65
22 -74 -63 -75 54
17 0 32 2 4
22 44 7 6 5
12 33 6 9 4
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
3
The operation you chose is invalid for the given matrices.
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
```

## 3x3 and YxZ determinant

```
"D:\Sophomore\2nd semester\Programming\Project\MatrixCalc\bin\Debug\MatrixCalc.exe"
Please enter dimensions of Matrix A:
3 3
Please enter dimensions of Matrix B:
8 8
Please enter values of Matrix A:
54 58 -4
-87 -35 -80
72 57 11
Please enter values of Matrix B:
-43 13 -30 42 -57 73 48 11
-87 -74 -59 24 82 -50 -43 -33
-6 47 41 -29 -87 -13 48 50
-41 -84 -71 60 71 64 3 56
34 11 73 59 8 -40 -93 2
65 -33 -38 -57 69 0 100 -13
51 10 -15 13 -67 83 74 -87
-55 -6 -80 -33 48 73 -47 83
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
5
-43368
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
6
403014375774797
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
```

## Invalid YxZdeterminant & Quit

```
"D:\Sophomore\2nd semester\Programming\Project\MatrixCalc\bin\Debug\MatrixCalc.exe"
Please enter dimensions of Matrix A:
2 4
Please enter dimensions of Matrix B:
3 5
Please enter values of Matrix A:
44 21 3 2
1 4 6 8
Please enter values of Matrix B:
22 4 78 99 2
21 11 3 4 5
23 4 7 5 3
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
5
The operation you chose is invalid for the given matrices.
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
6
The operation you chose is invalid for the given matrices.
Please choose operation type(1: A+B, 2: A-B, 3: AxB, 4: A*inverse(B), 5: |A|, 6: |B|, 7: quit):
7
Thank you!
Process returned 0 (0x0) execution time : 30.669 s
Press any key to continue.
```

