System of Linear Equation by Multidimensional Matrix

```
1  // System Of Linear Equation By Multidimensional Matrix
2  // 2x + 5y = 24
3  // 7x - 2y = 6
4  //
5  // A = |2   5|   ,   X = |24  5|  ,   Y = |2 24|
6  //     |7  -2|   ,       | 6 -2|  ,       |7  6|
7  //
8  // x = X/A and y = Y/A
9
10 #include<iostream>
11
12 using namespace std;
13
14 int main()
15 {
16     int A[2][2] = { {2, 5}, {7, -2} };
17     int X[2][2] = { {24, 5}, {6, -2} };
18     int Y[2][2] = { {2, 24}, {7, 6} };
19
20     int detA = A[0][0] * A[1][1] - A[0][1] * A[1][0];
21     int detX = X[0][0] * X[1][1] - X[0][1] * X[1][0];
22     int detY = Y[0][0] * Y[1][1] - Y[0][1] * Y[1][0];
23
24     int x = detX / detA;
25     int y = detY / detA;
26
27     cout << "x = " << x << ", y = " << y << endl;
28
29     return 0;
30 }
```

Output

```
1  x = 2, y = 4
```