Visiting Relatives
Filename: `relatives`

You must visit each of your relatives during the summer after you graduate college, because after that you start a job and have no idea when you'll have an extended amount of free time. Of course, since you don't have the job yet, you have little money and want to minimize your traveling costs.

The Problem:

Given the cost of traveling between each pair of locations, write a program to calculate the minimum cost to start at your home, travel to each relative exactly once, and return home. (Note: Thus, if you are at location 3 and want to go to location 5 next, and this cost is $45.99, but the cost of going from location 3 to 4 is $20.00 and the cost of going from 4 to 5 is $20,00, if you had previously visited location 4, you must still pay $45.99 for the direct route, since going via location 4 means visiting it twice, and you'd hate to show any one relative more love than the others, since they'd get jealous!)

The Input:

The first line of the input file will have a single positive integer, T $(T \leq 20)$, representing the number of test cases in the file. The first line of each test case will contain a single positive integer, n $(n \leq 15)$, representing the total number of locations you must visit, including your own home. The data for the case follows on the following n lines. The first of these n lines will contain the cost of traveling from your home (location 0) to all locations, numbered 0 through $n-1$, respectively. All of these costs will be positive real numbers expressed to exactly 2 decimal places, less than 1000. The following $n-1$ lines will contain the corresponding traveling costs from locations 1 through $n-1$, respectively.

The Output:

For each test case, output the cost in dollars, rounded to two decimal places for the minimal traveling cost of starting from your home, visiting each relative exactly once and returning home.

Sample Input:

```
1
3
0.00 2.00 4.00
3.00 0.00 5.00
2.50 5.50 0.00
```

Sample Output:

```
9.50
```