

## A. Line to Cashier

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

Little Vasya went to the supermarket to get some groceries. He walked about the supermarket for a long time and got a basket full of products. Now he needs to choose the cashier to pay for the products.

There are  $n$  cashiers at the exit from the supermarket. At the moment the queue for the  $i$ -th cashier already has  $k_i$  people. The  $j$ -th person standing in the queue to the  $i$ -th cashier has  $m_{i,j}$  items in the basket. Vasya knows that:

- the cashier needs 5 seconds to scan one item;
- after the cashier scans each item of some customer, he needs 15 seconds to take the customer's money and give him the change.

Of course, Vasya wants to select a queue so that he can leave the supermarket as soon as possible. Help him write a program that displays the minimum number of seconds after which Vasya can get to one of the cashiers.

### Input

The first line contains integer  $n$  ( $1 \leq n \leq 100$ ) — the number of cashes in the shop. The second line contains  $n$  space-separated integers:  $k_1, k_2, \dots, k_n$  ( $1 \leq k_i \leq 100$ ), where  $k_i$  is the number of people in the queue to the  $i$ -th cashier.

The  $i$ -th of the next  $n$  lines contains  $k_i$  space-separated integers:  $m_{i,1}, m_{i,2}, \dots, m_{i,k_i}$  ( $1 \leq m_{i,j} \leq 100$ ) — the number of products the  $j$ -th person in the queue for the  $i$ -th cash has.

### Output

Print a single integer — the minimum number of seconds Vasya needs to get to the cashier.

### Examples

input
1 1 1 1
output
20

  

input
4 1 4 3 2 100 1 2 2 3 1 9 1 7 8
output
100

### Note

In the second test sample, if Vasya goes to the first queue, he gets to the cashier in  $100 \cdot 5 + 15 = 515$  seconds. But if he chooses the second queue, he will need  $1 \cdot 5 + 2 \cdot 5 + 2 \cdot 5 + 3 \cdot 5 + 4 \cdot 15 = 100$  seconds. He will need  $1 \cdot 5 + 9 \cdot 5 + 1 \cdot 5 + 3 \cdot 15 = 100$  seconds for the third one and  $7 \cdot 5 + 8 \cdot 5 + 2 \cdot 15 = 105$  seconds for the fourth one. Thus, Vasya gets to the cashier quicker if he chooses the second or the third queue.