Traffic Lights
Input File: trafficlights.txt

You are trying to drive across downtown Landport, from the northwest corner to the southeast corner. Of course, you have terrible traffic light luck, as when you started driving, all the traffic lights turned red. At each intersection, there is a traffic light that alternates between red for a number of minutes between 0 and 9, and green for 1 minute. If a light is red, you cannot pass through it. If a light is green, you can pass through it. Note that the direction a vehicle enters an intersection does not affect its passability. If moving between intersections takes 0.9 minutes, what is the shortest amount of time it would take to reach your destination?

Input:

An integer, n, the number of data sets.
For each data set:
An integer x ($0 \leq x \leq 9$), the size of the x by x grid. There are x^2 intersections.
For the next x lines:
x numbers indicating the length of time each red light takes.

Output:

For each data set, the fewest number of minutes needed to reach the destination, rounded to the nearest tenth.

Example Input:

```
1
4
5290
9681
0751
1080
```

Example Output:

```
10.8
```