# Triangles

There are given n isosceles right triangles on a plane. Each triangle can be described by three integers x,y,m (m>0). Vertices of such a triangle are points which have coordinates (x;y), (x+m;y) and (x; y+m).

Write a program which calculates the total area covered by triangles.

## Input

The first line of the input contains one positive integer n (n <= 2000), the number of triangles on a plane.

The next n lines of the file describe the triangles, one triangle per line. Each line contains three integers $x_i$, $y_i$ and $m_i$, separated by single spaces ($1 <= i <= n$, $-10^7 <= x_i <= 10^7$, $-10^7 <= y_i <= 10^7$, $0 < m_i <= 1000$).

## Output

On the first line of the output one number with exactly one digit after decimal point must be written – the total area covered by triangles.

## Example
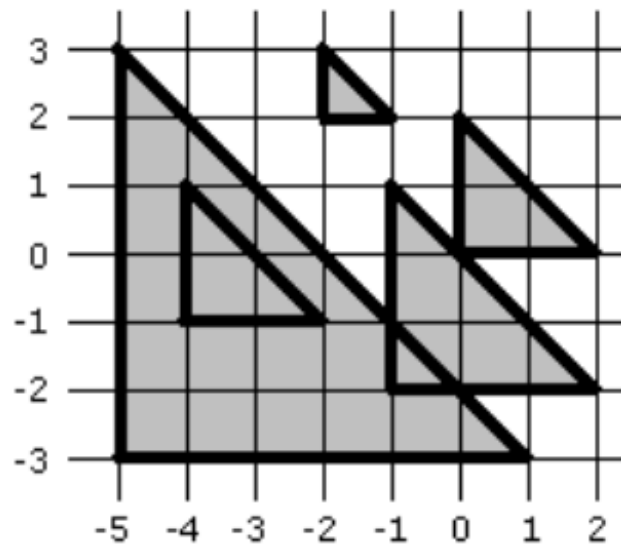


**Input**
```
5
-5 -3 6
-1 -2 3
 0 0 2
-2 2 1
-4 -1 2
```

**Output**
```
24.5
```