

2415 - Find the Wedding Cake Volume

Description

A Wedding Cake is commonly formed by any positive number (even 10, as you can see below) of minor cakes. Each minor cake, in general cases (or at least for our problem), has a cylindrical form, with a **radius** and a **height**.



The task is as follow:

- Given the **radius** and **height** of the minor cakes, can you find the volume of the entire Wedding Cake?

Input specification

In the first line, a integer number $1 \leq T \leq 100$, the number of tests. For each one:

- One line containing a integer numbers, $1 \leq N \leq 10$, the amount of minor cakes.
- N lines, each one containing two space-separated integer number, $1 \leq R \leq 100$ and $1 \leq H \leq 100$, the **radius** and **height** of the i -th ($1 \leq i \leq N$) minor cake.

Output specification

For each test case, you should print:

- The volume of the entire Wedding Cake, rounded up to two decimal places.

Sample input

```
3
1
1 1
2
1 1
2 2
5
2 3
```

3 2
1 10
10 1
100 100

Sample output

3.14
28.27
3142032.48

Hint(s)

Source	Yonny Mondelo Hernández
Added by	ymondelo20
Addition date	2013-05-17
Time limit (ms)	5000
Test limit (ms)	1000
Memory limit (kb)	130000
Output limit (mb)	64
Size limit (bytes)	15000
Enabled languages	Bash C C# C++ Java Pascal Perl PHP Python Ruby Text