# Softuniada 2019

## Tri-Force

The TriForce is specific figure, formed by generating all possible triangles in a specific circle. You have been tasked to generate a TriForce by given parameters.

You will be given a **P** – a **perimeter** and a **R** – a **radius** of **circle**. Generate the sides of **all possible triangles**   
inscribed in a circle with the given **R** which have a **perimeter** **equal** to the **given one**.

**NOTE**: Consider only **integer** sides.

**NOTE**: A triangle with sides – a = 10, b = 12, c = 5, should be considered different from a triangle with sides a = 5, b = 12, c = 10.

**NOTE**: Generating should always be done from the side with the greatest possible value. See the examples for more info.

### Input

The input will consist of 2 lines:

* On the **first** input line you will receive **P** – the **perimeter**.
* On the **second** input line you will receive **R** – the **radius** of the **circle**.

### Output

The output will consist of several lines:

* As output you must print all possible triangles, following the rules above, in the following format:

{a}.{b}.{c}

### Constraints

* The perimeter **P** will be an integer (naturally, if all sides are integers) in **range [0, 30000]**.
* The radius **R** will be a floating-point number in **range [0, 15000]**.
* Allowed time / memory: 100ms / 16MB.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 12 2.5 | 5.4.3  5.3.4  4.5.3  4.3.5  3.5.4  3.4.5 |
| 30  6.5 | 13.12.5  13.5.12  12.13.5  12.5.13  5.13.12  5.12.13 |