

1493 - Geometrical Task II

Description

Do you like geometrical task? Well, today we continue working with the calculation of areas. Then, given the shape, you must find the area (real value rounded up to the second decimal place).

Input specification

The only line of the input contain a word S, the shape for the task. If the shape is "circle" you must read also a positive real number R, the radio of the circle. If it's "triangle" you must read also two positive real numbers A and B, the base and the relative height. If it's "rhombus" you must read also two positive real numbers A and B, the diagonals (one perpendicular to the other) of the rhombus. For this task you can assume that $1.0 \leq A, B, R \leq 1000.0$ and $PI = 3,14$.

Output specification

Print a single line with the number R, representing the calculated area for the shape.

Sample input

```
circle 5.00
```

Sample output

```
78.50
```

Hint(s)

Source	Yonny Mondelo Hernández (UCI)
Added by	ejaltuna
Addition date	2011-10-13 09:47:55.0
Time limit (ms)	10000