

# Circle

Time Limit : 1 sec, Memory Limit : 131072 KB

## Circle

Write a program which calculates the area and circumference of a circle for given radius  $r$ .

## Input

A real number  $r$  is given.

## Output

Print the area and circumference of the circle in a line. Put a single space between them. The output should not contain an absolute error greater than  $10^{-5}$ .

## Constraints

- $0 < r < 10000$

## Sample Input 1

2

## Sample Output 1

12.566371 12.566371

## Sample Input 2

3

## Sample Output 2

28.274334 18.849556

Source: [https://onlinejudge.u-aizu.ac.jp/problems/ITP1\\_4\\_B](https://onlinejudge.u-aizu.ac.jp/problems/ITP1_4_B)