Problem ID: basaltbreakdown

One of Iceland's most popular attractions is *Svartifoss* ("black waterfall"). Its name derives from the black hexagonal basalt columns that frame the waterfall on either side. Originally formed from cooling lava, centuries of erosion have shaped the columns into their characteristic shape.

Svartifoss by Piotr Wojtkowski, CC0 Public Domain

A group of geologists at RU went on an excursion to Svartifoss. They took some probes and performed various measurements on the hexagonal rocks that have broken off the basalt walls.

Just as they return to RU, they realise that they have forgotten a crucial measurement. They have determined the area of the hexagonal face, but they did not write down what its perimeter was. Assuming that the face has the shape of a perfect regular hexagon, help the geologists compute the perimeter.

Input

The input consists of:

- One line with an integer a ($1 \leq a \leq 10^{18}$), the area of the hexagonal rock face in square centimetres.

Output

Output the perimeter of the rock face in centimetres. Your answer should have an absolute or relative error of at most 10^{-6}.

Sample Input 1	Sample Output 1
50	26.32148026

Sample Input 2	Sample Output 2
1234	130.76240122