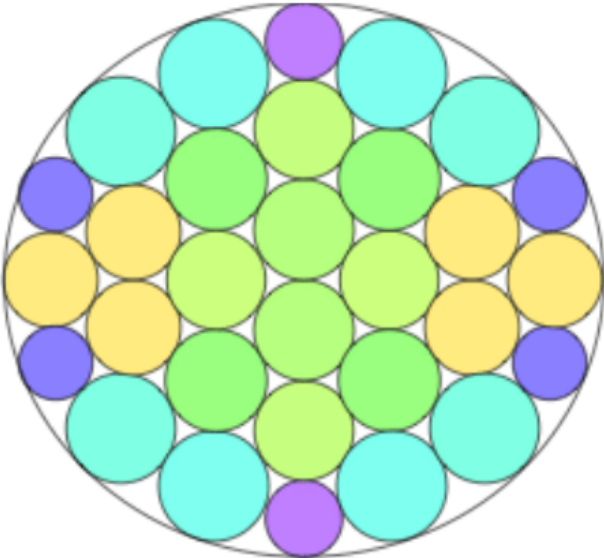


13199 Circles in Ellipse

The following picture shows the best way to have 30 circles with the largest possible sum of radii packed inside an ellipse with perimeter $2\pi * A$. Given A , you will compute $\sum R$, the sum of all radii over the 30 circles. Each color represent a circle of different size.



Input

A number of of inputs, each line with an integer $0 \leq A \leq 1000000000$.

Output

Output the answer rounded to an integer.

Sample Input

1
10
100

Sample Output

5
50
503