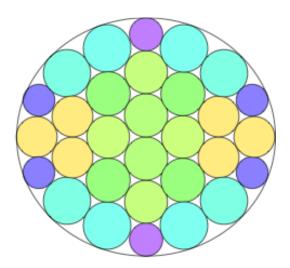
Problem E: Circles in Ellipse Time Limit: 3 seconds



Description

The following pictures show 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 $\Sigma \mathbf{R}$, 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 $0 \le A \le 1000000000$.

Output

Output the answer rounded to an integer.

Sample Input

1 10 100

Sample Output

5 50 503