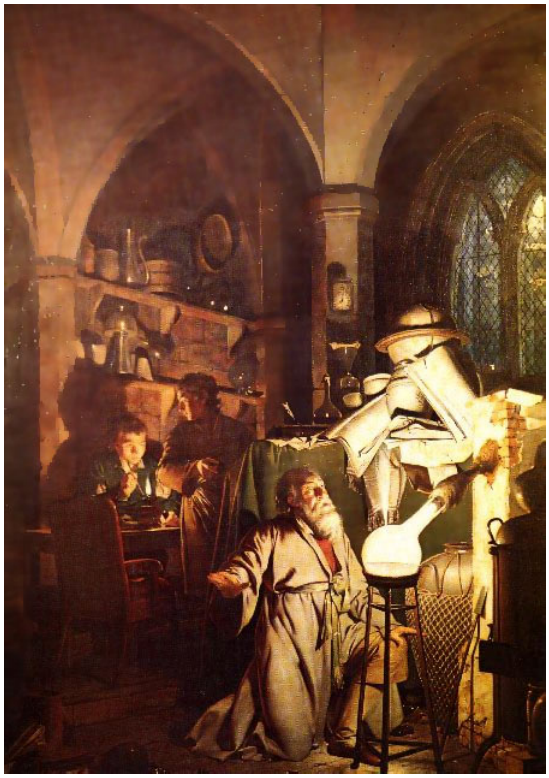
B. « The Alchemist »

Problem

An alchemists discovered that to create the Philosophers Stone, he only needs two ingredients : star dust and crocodile tears.

Indeed, he calculated that he should put in a cauldron X doses of star dust and Y doses of crocodile tears such that $X^2 + Y + X * Y = G$ (with X and Y two positive integers, and G the magic equilibrium constant), then shake them 7 times with a golden spoon.

The alchemist wonders how many ways there are to create the Philosophers Stone, given that he has in stock P doses of star dust and L doses of crocodile tears.



The Alchemist in Search of the Philosophers Stone, by Joseph Wright of Derby (1771)

Input

One one space-separated line :

- an integer $0 \leq P \leq 10^5$: the quantity of star dust available ;
- an integer $0 \leq L \leq 10^5$: the quantity of crocodile tears available ;
- an integer $1 \leq G \leq 10^5$: the magic equilibrium constant.

Output

- the number of ways to create the Philosophers Stone.

Examples

Example 1 - Impossible

Input	Output
91 5 967	0

Example 2 - Only one way

Input	Output
69 83 2224	1

Example 3 - Multiple ways

Input	Output
38 100 973	3