

Problem A. Area Illumination

Time limit: 1 second
Memory limit: 512 megabytes

A new rectangular square of size m by n meters has been built in the city. To illuminate the square, the mayor wants to order innovative lamps, each of which illuminates a square of size $k \times k$ meters, with sides parallel to the boundaries of the square.

The mayor does not want to spend the entire city budget, so he wants to buy as few lamps as possible to illuminate the entire square. Help him determine how many lamps he needs to buy.

Input

The input consists of three integers n , m , and k ($1 \leq n, m, k \leq 10^9$) — the length of the square, the width of the square, and the length of the side of the square illuminated by each lamp.

Output

Output the minimum number of lamps required to illuminate the entire square.

Examples

standard input	standard output
10 9 3	12
4 6 2	6