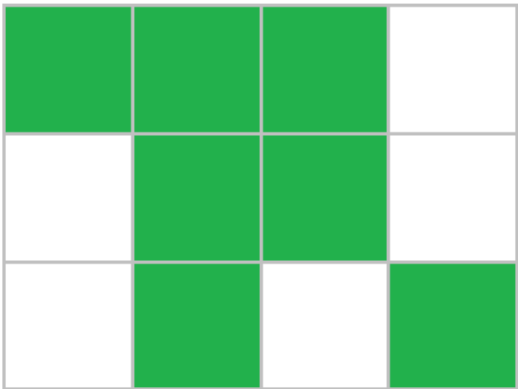


D. Place of the Olympiad

time limit per test: 1 second
memory limit per test: 256 megabytes

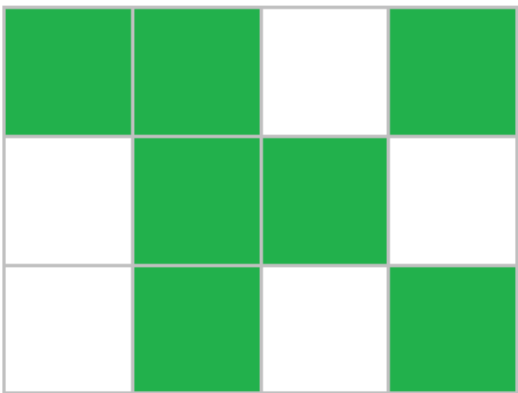
For the final of the first Olympiad by IT Campus "NEIMARK", a rectangular venue was prepared. You may assume that the venue is divided into n rows, each containing m spots for participants' desks. A total of k participants have registered for the final, and each participant will sit at an individual desk. Now, the organizing committee must choose the locations for the desks in the venue.

Each desk occupies one of the m spots in a row. Moreover, if several desks occupy consecutive spots in the same row, we call such a group of desks a *bench*, and the number of desks in the group is the bench's length. For example, seating 7 participants on a 3×4 venue (with $n = 3, m = 4$) can be arranged as follows:



In the figure above, the first row has one bench of length 3, the second row has one bench of length 2, and the third row has two benches of length 1.

The organizing committee wants to choose the locations so that the length of the longest bench is as small as possible. In particular, the same 7 desks can be arranged in a more optimal way, so that the lengths of all benches do not exceed 2:



Given the integers n , m , and k , determine the minimum possible length of the longest bench.

Input

Each test contains multiple test cases. The first line contains the number of test cases t ($1 \leq t \leq 10^4$). The description of the test cases follows.

A single line of each test case contains three positive integers — n, m, k ($1 \leq n, m, k \leq 10^9, k \leq n \cdot m$).

Output

For each test case, output a single number — the minimum possible length of the longest bench.

Example

input	Copy
5 3 4 7 5 5 5 1 13 2 2 4 7 1 5 4	
output	Copy
2 1 1 4 2	

Codeforces Round 1013 (Div. 3)

Finished

Practice

★

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest

→ Submit?

Language: GNU G++20 13.2 (64 bit, win)

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
312506245	Mar/26/2025 03:54	Accepted
312491636	Mar/25/2025 23:29	Wrong answer on test 2

→ Problem tags

binary search greedy math *1200

No tag edit access

→ Contest materials

Announcement

Tutorial