Problem B : Lantern Festival

Every year, the ancient city of Arvand hosts a magnificent Lantern Festival. Thousands of glowing lanterns rise into the night sky, forming a river of light that stretches far beyond the horizon. For centuries, this tradition has symbolized hope, unity, and the arrival of a prosperous new year.

This year, the mayor of Arvand wants the festival to be brighter than ever. During the opening ceremony, a large group of volunteers marches through the city carrying illuminated lanterns. The visual effect is only successful if strictly more than half of all volunteers are holding lanterns.

The volunteers are divided into three groups:

- **Core Volunteers** — They always attend and always carry lanterns.
- **Opposition Volunteers** — They always attend but this year refuse to carry lanterns.
- **Neutral Volunteers** — They attend, but they have not yet decided whether to participate actively.

The mayor can persuade some Neutral Volunteers to carry lanterns. Your task is to determine the minimum number of Neutral Volunteers that must be convinced so that the total number of lantern-holders becomes strictly greater than half of all volunteers.

If achieving this is impossible (even if all Neutral Volunteers carry lanterns), print `-1`.

Input

A single line containing three space-separated integers:

$$N\ C\ O$$

Where:

- N — total number of volunteers,
- C — number of Core Volunteers (always carry lanterns),
- O — number of Opposition Volunteers (never carry lanterns).

$$1 \le N \le 10^9$$
$$0 \le C, O \le N$$
$$C + O \le N$$

Output

Print a single integer:

- The minimum number of Neutral Volunteers that must be persuaded,
- `-1` if it is impossible.

Example

Standard Input	Standard Output
10 4 3	2

Standard Input	Standard Output
8 3 5	-1

Standard Input	Standard Output
9 5 2	0