Snacks

Input file: standard input
Output file: standard output

Time limit: 2 seconds Memory limit: 512 megabytes

Cookie Monster currently has x chocolate chip cookies, y snickerdoodle cookies, and z macadamia cookies. He wants to eat as many good snacks as possible, where a good snack consists of exactly two cookies with different types.

However, Elmo stole and ate all of his macadamia cookies! Determine how many good snacks Cookie Monster can eat after having his macadamia cookies stolen.

Input

The first line will contain 3 integers x, y, and z ($1 \le x$, y, $z \le 10^9$).

Output

Output a single integer — the maximum number of good snacks Cookie Monster can eat.

Examples

standard input	standard output
1 2 2	1
10 10 100	10

Note

In the first sample test, after the 2 macadamia cookies are stolen, Cookie Monster has 1 chocolate chip cookie and 2 snickerdoodle cookies remaining, so he can eat 1 good snack.