

Problem Climbing Worm

Input File: WormIn.txt
Output File: WormOut.txt
Program File: Worm

An inchworm is at the bottom of a well n inches deep. It has enough energy to climb a certain number of inches, u , every minute, but has to rest for one minute before climbing again. During the rest, it slips down d inches. The process of climbing and resting then repeats. Of course d is always less than u . Furthermore, we will always count a portion of a minute as a whole minute and if the worm (while climbing) just makes it to the top of the well, we will declare the race over.

You and your friends are taking bets as to how long it will take the inchworm to climb to the top of the well. Since a lot of money is at stake, you have decided to write a program to determine the time, given the height of the well, the climbing speed and the distance the worm slides back while it is resting.

Inputs

One input line per race. Each line contains three integers: the height of the well (in inches) the climbing speed (in inches per minute) and the distance (in inches) the worm slides back while it is resting. An input of 0 0 0 will terminate the inputs.

Outputs

The time it takes for the worm to reach the top of the well, in minutes, one race per line.

Sample inputs

```
10 2 1
20 3 1
0 0 0
```

Sample outputs

```
17
19
```