

## B - Climbing Worm

**Input:** worm.in

**Output:** standard output

An inch worm is at the bottom of a well  $n$  inches deep. It has enough energy to climb  $u$  inches every minute, but then has to rest a minute before climbing again. During the rest, it slips down  $d$  inches. The process of climbing and resting then repeats. How long before the worm climbs out of the well? We'll always count a portion of a minute as a whole minute and if the worm just reaches the top of the well at the end of its climbing, we'll assume the worm makes it out.

### Input

There will be multiple problem instances. Each line will contain 3 positive integers  $n$ ,  $u$  and  $d$ . These give the values mentioned in the paragraph above. Furthermore, you may assume  $d < u$  and  $n < 100$ . A value of  $n = 0$  indicates end of input.

### Output

Each input instance should generate a single integer on a line, indicating the number of minutes it takes for the worm to climb out of the well.

### Sample Input

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

### Sample Output

```
17
19
```