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## 1516. Climbing Worm

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Time Limit: 1.0 Seconds Memory Limit: 65536K

Total Runs: 6447 Accepted Runs: 3773

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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 output.

### 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
```

**Source:** East Central North America 2002 Practice

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