**Climbing Worm**

**Time Limit: 2000/1000 MS (Java/Others)    Memory Limit: 65536/32768 K (Java/Others)  
Total Submission(s): 13353    Accepted Submission(s): 9016**

**Problem Description**

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](http://acm.hdu.edu.cn/search.php?field=problem&key=East+Central+North+America+2002&source=1&searchmode=source)

**Recommend**

We have carefully selected several similar problems for you:  [1170](http://acm.hdu.edu.cn/showproblem.php?pid=1170) [1425](http://acm.hdu.edu.cn/showproblem.php?pid=1425) [1257](http://acm.hdu.edu.cn/showproblem.php?pid=1257) [1800](http://acm.hdu.edu.cn/showproblem.php?pid=1800) [2111](http://acm.hdu.edu.cn/showproblem.php?pid=2111)