The government wants people to recycle their used items rather than simply throw them away for environmental protection. To encourage such behavior, government sponsors a new policy of getting one more items for free by recycling m items. That is, you can get more items if you recycle all the purchased items. Now write a program to help the calculation of the number of items we can use by given the budget b, the price of each item p, and the value of m for getting new items.

Input

The input has several cases and ends with EOF. Each case contains three integers, which in turn denote the budget b, the price p, and the value m.

Output

For each case, output the maximum number of items we can get. Each case should be in a separate line.

Sample Input

100 20 2
500 40 5
1000 50 8

Sample Output

9
14
22