Chocolate Feast

Problem Statement

Little Bob loves chocolate, and he goes to a store with \$ \\$N \$ in his pocket. The price of each chocolate is \$ \\$C \$. The store offers a discount: for every \$M\$ wrappers he gives to the store, he gets one chocolate for free. How many chocolates does Bob get to eat?

Input Format:

The first line contains the number of test cases, \$T\$.

\$T\$ lines follow, each of which contains three integers, \$N\$, \$C\$, and \$M\$.

Output Format:

Print the total number of chocolates Bob eats.

Constraints:

\$1 \le T \le 1000\$

\$2 \le N \le 10^5\$

\$1 \le C \le N\$

\$2 \le M \le N\$

Sample input

3

10 2 5 12 4 4

622

Sample Output

6

5

Explanation

In the first case, he can buy 5 chocolates with |\$10 and exchange the 5 wrappers to get one more chocolate. Thus, the total number of chocolates is 6.

In the second case, he can buy 3 chocolates for |\$12. However, it takes 4 wrappers to get one more chocolate. He can't avail the offer and hence the total number of chocolates remains 3.

In the third case, he can buy 3 chocolates for |\$6. Now he can exchange 2 of the 3 wrappers and get 1 additional piece of chocolate. Now he can use his 1 unused wrapper and the 1 wrapper of the new piece of chocolate to get one more piece of chocolate. So the total is 5.