SAC '22 Code Challenge 3 P1 - Hair Hazards

Time limit: 1.0s **Memory limit:** 256M

When school finishes, Fayez decides to experiment with new hair lengths.

Currently, Fayez has a hair length of H cm.

Whenever he visits his barber in the summer, his hair will be cut S cm shorter.

He will visit his barber Q times and wants to know his hair length after each haircut.

Can you help him?

Input Specification

The first line will contain H ($100 \le H \le 100\,000$), the length of Fayez's hair initially.

The next will contain S ($1 \le S \le 1000$), the length of hair trimmed off from each haircut.

The next line will contain Q $(1 \leq Q \leq \lfloor \frac{H-1}{S} \rfloor)$, the number of haircuts Fayez will get.

Output Specification

Output the length of Fayez's hair after each haircut in cm.

Sample Input

200

2

3

Sample Output

198

196

194