

This morning, the course authors decided to add another, Very Easy Task. The executive secretary printed her condition in one copy, and now he needs to have time to make another N copies before the start of the course. He has two photocopiers at his disposal, one of which copies the sheet in x seconds, and the other - for y . (It is allowed to use both one copy machine and both at the same time. You can copy not only from the original, but also from the copy.) Help him figure out what is the minimum time it takes.

Three natural numbers N , x and y , separated by a space, enter the program input ($1 \leq N \leq 2 \cdot 10^8$, $1 \leq x, y \leq 10$).

Print one number - the minimum time in seconds required to obtain N copies.

Sample input 1:

4 1 1

Sample output 1:

3

Sample input 2:

5 1 2

Sample output 2:

4