Problem C. Custom Banknotes

Input file:	*standard input*
Output file:	*standard output*
Time limit:	2 seconds
Memory limit:	1024 mebibytes

In the Jagan Kingdom, only 1-yen banknotes have been issued so far. However, due to the increase in the circulation of banknotes, the kingdom has decided to renew its banknote system entirely. The new banknote system is represented by a sequence of positive integers $x = (x_1, x_2, \ldots, x_k)$. This means that the new system uses k types of banknotes with denominations of $x_1, x_2, \ldots, x_k$ yen. You can decide the number of banknote types k and their values $x_1, x_2, \ldots, x_k$ under the following restrictions:

- k is a positive integer.
- $1 = x_1 < x_2 < \ldots < x_k$.
- x_{i+1} must be a multiple of x_i $(1 \le i \le k-1)$.

In the Jagan Kingdom, goods are often traded at prices of a, b, or c yen. Therefore, the inconvenience of the new banknote system is defined as:

(The minimum number of banknotes required to represent a yen) +
(The minimum number of banknotes required to represent b yen) +
(The minimum number of banknotes required to represent c yen).

Your task is to find the minimum possible value of this inconvenience.

Input

The first line of the input contains three integers: a, b, and c $(1 \le a < b < c \le 10^8)$.

Output

Print one integer: the minimum possible value of inconvenience for the new banknote system.

Examples

standard input	*standard output*
6 11 15	6
99999959 99999971 99999989	11