Flowering plants

I love plants. I love them so much that I raise exactly three plants in my garden. These plants have a regular pattern: the flowering of the i-th plant has a period of f_i. So this plant will flower on day f_i, day $2f_i$, day $3f_i$, ..., and so on.

I want to see all three plants flowered at once. So I would like to know the fastest date that all plants are flowered. Could you please make a program that calculates that for me?

Input

Your input consists of an arbitrary number of line, but no more than 10,000.

Each line consists of three integers f_1, f_2, f_3 $(1 \leq f_i \leq 10^6)$, each separated by a space.

The end of input is indicated by a line containing only the value -1.

Output

For each input line, print the fastest date that all plants are flowered.

Example

Standard input	Standard output
3 4 6 10 11 12 -1	12 660

Explanation of the example

For the first example:

PLANT	1	2	3	4	5	6	7	8	9	10	11	12	13
1			O			O			O			O	
2				O				O				O	
3						O						O	

The first plant flowers every 3 days, the second plant flowers every 4 days, and the third plant flowers every 6 days. The 12th day is the fastest day that all plants are flowered.

Time Limit

1 second.