

Gaitonde's Wish

Gaitonde wants to become larger than his friend Bunty. Gaitonde and Bunty weigh a and b respectively.

Gaitonde's weight is tripled after every year, while Bunty's weight is doubled after every year. After how many full years will Gaitonde become strictly larger (strictly heavier) than Bunty?

Input

The only line of the input contains two integers a and b ($1 \leq a \leq b \leq 10$) — the weight of Gaitonde and the weight of Bunty respectively.

Output

Print one integer, denoting the number of years.

Constraints

$$1 \leq a \leq 10$$

$$1 \leq b \leq 10$$

$$a \leq b$$

Sample Input:

4 9

Sample Output:

3

Explanation:

After first year their weights will be $4 \cdot 3 = 12$ and $9 \cdot 2 = 18$. after 2nd year their weights will be $12 \cdot 3 = 36$ and $18 \cdot 2 = 36$. after 3 years Gaitonde will be 108 and Bunty will be 72.

Gochi Chai

Bunty requires to send an exact number of boxes of Gochi Chai to Ganesh but the no. of boxes is encrypted in a specific way, apparently, Bunty is weak in maths so he wants you to decrypt the number of boxes for him.

The number of boxes is the sum of all multiples of a number '**p**' between the range (**m,n**) both inclusive.

Print the number of boxes.

CONSTRAINTS:

$0 \leq m \leq n \leq 10^9$

$0 \leq p \leq 10^9$

INPUT FORMAT:

Single line input which will contain n,m,p in that order.

OUTPUT FORMAT:

A Single Integer

SAMPLE INPUT:

10 5 2

SAMPLE OUTPUT:

24