Living Cost

Beo go to market every sunday to buy 3 kinds of food which he need for the next week. The kinds of food have price p1, p2, and p3 for each piece respectively. With the exactly X vnd, how many ways he can buy?

Input

- The first line has an integer X ($1 \leq X \leq 10^7$).

- The second line has 3 integers p_1, p_2, p_3 respectively ($1 \leq p_i \leq 10^7$).

Output

Print the number of way he can buy.

Sample

Input	Output
28	6
3 5 7	

*Beo can buy any of these set (0*3+0*5+4*7), (1*3+5*5+0*7), (2*3+3*5+1*7), (3*3+1*5+2*7), (6*3+2*5+0*7), (7*3+0*5+1*7)*