



STUDENT REPORT

DETAILS

Name

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Roll Number

23D21A05H4

EXPERIMENT

Title

NUMBER OF COMBINATIONS LEADING TO A PRODUCT

Description

Problem Statement:

You are given an array arr and a product m. Your task is to find the number of possible unique triplets whose product of elements is m.

Input Format:

- The first line contains the integer, n
- The second line contains space seperated integers of the array, arr
- The third line contains the product m.

The input will be read from the STDIN by the candidate

Output Format:

The output consists of a single integer, i.e. the count of unique triplets having product m.

The output will be matched to the candidate's output printed on the STDOUT

Example:

Input:

7  
5 3 20 10 1 4 2  
60

Output:

3

Explanation:

Product m:60

Possible triplets for product m: (5,4,3),(20,3,1), (10,3,2)

The count of unique triplets is 3.

Source Code:

```
from itertools import combinations
n= int(input())
arr = list(map(int,input().split()))
m= int(input())
count = sum(1 for triplet in combinations(arr,3) if triplet[0]*triplet[1]*triplet[2] == m)
print(count)
```

RESULT

6 / 6 Test Cases Passed | 100 %

