

Count the number of positive integer solutions to the following equation:

$$a_1x_1 - a_2x_2 + a_3x_3 - a_4x_4 + a_5x_5 - a_6x_6 = 0$$

where  $a_i$  are integer coefficients, and  $x_i$  are the variables such that  $1 \leq x_i \leq M$ .

## Input

A number of of inputs ( $\leq 600$ ) described as follows.

The first line is  $M$  on a single line, followed by the 6 coefficients  $a_i$  on the next line. Constraint is  $1 \leq M \leq 100$  and  $0 < a_i \leq 1000000$ .

## Output

For each input, output the number of solutions on a single line.

## Sample Input

```
2
1 1 1 1 1 1
```

## Sample Output

```
20
```