

Class Meets

At the WW-P High Schools, students follow an absurd schedule due to the ongoing COVID-19 pandemic to keep the community safe, at the expense of students and staff becoming confused as to when they will meet.

In order to keep social distance, each student is assigned a rotation of days where they attend school in-person, and days when they are virtual. All students on M0 D0 begin by attending school in person, and are said to “meet” each other if they are both in-person or both virtual. Weekend dates also do not count toward the rotation dates (and students obviously never meet on a weekend), and months in this schedule are always considered 30 days long. The monthly schedule can be summarized as below:

Month 0

	0	1	2	3	4	_
_	7	8	9	10	11	_
_	14	15	16	17	18	_
_	21	22	23	24	25	_
_	28	29				

Month 1

		0	1	2	_	
_	5	6	7	8	9	_
_	12	13	14	15	16	_
_	19	20	21	22	23	_
_	26	27	28	29		

Please output the number of times two students will meet each other between the starting and ending month and date (inclusive) and the rotations of in-person and virtual days

Preconditions:

Month numbers are always less than 12, and date numbers are always less than 30. All in-person and virtual rotation days are between 1 and 9, inclusive.

Input Format

The first line contains the starting month followed by the starting date. The second line contains the ending month followed by the ending date. The third line contains the number of days student 1 attends school in-person, followed by the number of days student 1 attends school virtually. The fourth line contains the number of days student 2 attends school in-person, followed by the number of days student 2 attends school virtually.

Output Format

The output consists of a single integer of the number of times two students meet each other.

Sample Input 1

M0 D3
M0 D16
I2 V4
I4 V1

Sample Output 1

5

The starting date is Month 0, Day 3, and the ending date is Month 0, Day 16. Student 1 attends school in-person for 2 days, and then attends school virtually for the following 4 days, before repeating this rotation. Similarly, Student 2 attends school in-person for 4 days, and then attends school virtually for the following 1 day, before repeating this rotation.

Date	Student 1	Student 2	Meet?
M0 D0 (not included)	In-person	In-person	True
M0 D1 (not included)	In-person	In-person	True
M0 D2 (not included)	Virtual	In-person	False
M0 D3	Virtual	In-person	False
M0 D4	Virtual	Virtual	True
M0 D5 Weekend			
M0 D6 Weekend			
M0 D7	Virtual	In-person	False
M0 D8	In-person	In-person	True
M0 D9	In-person	In-person	True
M0 D10	Virtual	In-person	False
M0 D11	Virtual	Virtual	True
M0 D12			
M0 D13			
M0 D14	Virtual	In-person	False
M0 D15	Virtual	In-person	False
M0 D16	In-person	In-person	True
		Total	5

Sample Input 2

M1 D5
M2 D28
I5 V2
I8 V3

Sample Output 2

21

Sample Input 3

M5 D6
M8 D3
I3 V3
I4 V6

Sample Output 3

30