GCC '16 P1 - Watching Anime

A certain weeb wants to watch anime. However, he has C commitments over the next N hours, during which he cannot watch anime. To make matters worse, he is using a low quality streaming site that is only available for A periods of time. Given his schedule over the next N hours, figure out the total amount of time he can watch anime for.

Input Specification

The first line will contain 3 integers N ($1 \leq N \leq 10^9$), A ($1 \leq A \leq 10^5$), C ($1 \leq C \leq 10^5$).
The next A lines consist of 2 integers, a_i, b_i ($1 \leq a_i \leq b_i \leq N$), indicating that anime is streaming from hour a_i to b_i, inclusive.
The next C lines consist of 2 integers, c_i, d_i ($1 \leq c_i \leq d_i \leq N$), indicating that the weeb in question cannot watch anime from hour c_i to d_i, inclusive.

For 10% of points, $N \leq 1\,000$.

Output Specification

The total amount of anime this weeb can watch, in hours.

Sample Input 1

```
20 3 2
1 3
2 4
3 10
1 4
10 20
```

Sample Output 1

```
5
```

Explanation for Sample Output 1

The weeb can watch anime from hour 5 to hour 9.

Sample Input 2

```
20 3 2
1 20
3 5
6 8
1 10
1 20
```

Sample Output 2

```
0
```