

# Problem F

## Kutevi

**Problem ID:** kutevi  
**CPU Time limit:** 1 secor  
**Memory limit:** 1024 ME

**Author:** Bruno Rahle  
**Source:** Croatian Open Competition in Informat 2009/2010, contest #2  
**License:** For educationa

One day Mirko was cleaning up his room and found a ruler and a compass. He went to the school the next day and challenged his friend Slavko to a geometric construction battle. Mirko knows how to construct some angles using the ruler and compass and knows how to subtract and add any two angles he constructs. Slavko now shouts random angles and Mirko must draw them as fast as possible.

You are observing this battle and would like to know if Mirko can construct the angles Slavko shouts at all.

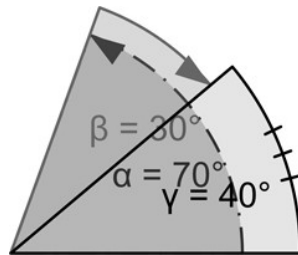


Figure 1: First example

### Input

The first line of input contains two integers,  $N$  ( $1 \leq N \leq 10$ ), number of angles Mirko knows how to construct initially and  $K$  ( $1 \leq K \leq 10$ ), the number of angles Slavko selected.

The second line of input contains  $N$  positive integers, all smaller than 360, the angles Mirko knows how to construct initially.

The third line contains  $K$  positive integers, all smaller than 360, the angles Slavko selected.

### Output

Output consists of  $K$  lines, one for each angle Slavko selected. The  $i$ -th line should contain "YES" if Mirko can construct the  $i$ -th angle, and "NO" otherwise.

#### Sample Input 1

```
2 1
30 70
40
```

#### Sample Output 1

```
YES
```

#### Sample Input 2

```
1 1
100
60
```

#### Sample Output 2

```
YES
```

#### Sample Input 3

```
3 2
10 20 30
5 70
```

#### Sample Output 3

```
NO
YES
```