

Robo-Golfer (250 points)

Introduction

After watching a golf game on TV, you drive to a golf course with some friends to try your luck at golf. Unfortunately it doesn't go so well. Fortunately, you are an engineer, and you decide to create a robot that plays golf for you.

This robot will hold a set of golf clubs, each being capable of hitting the ball an exact distance in yards. The robot will select a club and hit the ball towards the hole. If the hole is overshoot, the robot will turn around and keep shooting towards the hole.

You decide to test if the set of clubs you select will be able to drive the ball into the holes on your favorite golf course.

Input Specifications

The first line will be an integer $1 \leq N \leq 10$, representing the number of golf clubs. The second line will list the distances ($1 \leq X \leq 300$) that each club will hit the ball, separated by a space.

The third line will be an integer $1 \leq M \leq 50$, representing the number of holes your course has. The fourth line will list the distances ($1 \leq Y \leq 600$) from each tee (starting shot) to hole (goal), separated by a space.

Output Specifications

For each integer M , a line containing yes or no will be listed, representing if it is possible to sink the ball into each hole using the given set of golf clubs.

Sample Input/Output

Input

```
2
10 30
3
40 20 15
```

Output

```
yes
yes
no
```

Explanation

1. $40 = 10 + 30$

2. $20 = 30 - 10$

15 cannot be reached with 10 and 30

Input

2
8 14
3
30 6 51

Output

yes
yes
no

Explanation

1. $30 = 14 + 8 + 8$

2. $6 = 14 - 8$

51 cannot be reached with 8 and 14