

A New Room

Time Limit: 1.0s **Memory Limit:** 256M

The Computer Club needs a new room. And for a new room, they need to build walls first. Since they are obsessive people, they want the room to be a regular polygon. Namely, all of the walls need to be equal in length.

They purchase a robot named Bico for this task. But Bico builds a wall along a straight path and can make corners (in other words, start a new wall) at a certain angle a . Can you find whether Bico can build a regular polygon shaped room?

Input:

The first line contains an integer T , the number of tests. The following T lines will contain one integer, a , the angle at which Bico can make corners.

- $0 < T$
- $a < 180$

Output:

For each test, you should print "YES" if Bico can build a wall that CClubbers will be satisfied with and print "NO" otherwise.

Example

Input:

```
3
30
60
120
```

Output:

```
NO
YES
YES
```

Explanation:

There are three cases for the given input, namely 30, 60, 120. In the first case, it is impossible for Bico to build a room since there are no regular polygons with an interior angle of 30. It is possible to build an equilateral triangular room in the second case and a regular hexagonal room in the third case.