## Get Stronger

To shape his strength, Robert is doing weightlifting. His training set consists of $n<20$ weight plates: $x_{1}, x_{2}, \ldots, x_{n}\left(1 \leq x_{i} \leq 20\right\}$. Check, if he is able to compose a total weight of $X$ with his training set.

## Input data specification

First, an integer $t$ < 500 , describing the number of test cases. Next, for each of the test cases: $X, n$, and $n$ integers.

## Output data specification

For each of the test cases print one word: YES if Robert will be able to compose the required weight, or the word NO if this is impossible.

## Example

Input:
4
53
213
183
11109
54
1216
235
11121018
Output:
YES
NO
NO
YES

## Scoring

By solving this problem you score 10 points.

