

Square

Given a set of sticks of various lengths, is it possible to join them end-to-end to form a square?

Input

The first line of input contains T , the number of test cases. Each test case begins with an integer $4 \leq M \leq 20$, the number of sticks. M integers follow; each gives the length of a stick – an integer between 1 and 10,000.

Output

For each case, output a line containing “yes” if it is possible to form a square; otherwise output “no”.

Example

Input :	Ouput :
3	yes
4 1 1 1 1	no
5 10 20 30 40 50	yes
8 1 7 2 6 4 4 3 5	