10364 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 N, 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 is is possible to form a square; otherwise output 'no'.

Sample Input

3 4 1 1 1 1 5 10 20 30 40 50 8 1 7 2 6 4 4 3 5

Sample Output

yes no yes

