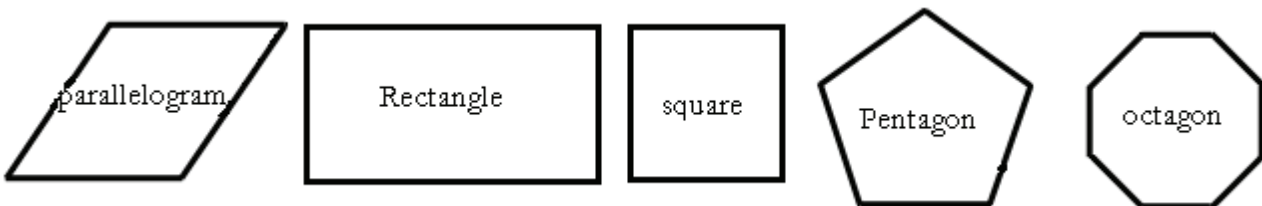# E Count the Polygons

Input: Standard Input
Output: Standard Output

A polygon is a plane figure that is bounded by a closed path and composed of a finite sequence of straight line segments. These segments are called its edges, and the points where two edges meet are the polygon's vertices.

You have got a set of **n** sticks of various lengths. How many ways can you choose **k** sticks from this set and form a polygon with **k** sides by joining the end points.

Input

The first line of input is an integer **T** (**T<100**) that indicates the number of test cases. Each case starts with a line containing 2 positive integers **N** and **K** (**3≤N≤30 & 3≤K≤N**). The next line contains **N** positive integers in the range [**1, 2^31**), which represents the lengths of the available sticks. The integers are separated by a single space.

Output

For each case, output the case number followed by the number of valid polygons that can be formed by picking **k** sticks from the given **n** sticks.

Sample Input

Sample Input	Output for Sample Input
4	Case 1: 2
4 3	Case 2: 15
10 10 20 20	Case 3: 0
6 4	Case 4: 1
1 1 1 1 1 1	
4 3	
10 20 30 100000000	
6 6	
2 3 4 5 6 7	