1. Apartments

Program Name: Apartments.java   **Input File: apartments.dat**

Mr. Jones is looking at buying one of several apartment complexes. Currently, most of the units in the complexes are rented but Mr. Jones is afraid that the tenant to unit ratio for a complex does not meet city code for density. You are to write a program that will help Mr. Jones determine if a complex's tenant to unit ratio meets the city code and the number of apartment units that are currently unoccupied. To meet the city density code, the tenant to unit ratio cannot exceed an average of 4 people per unit and includes only units that are occupied.

Input
The first line of input will contain a single integer n that indicates the number of apartment complexes that Mr. Jones is considering. For each apartment complex, the first line will contain an integer m which indicates the number of units in the apartment. Each of the following m lines will contain two integers separated by a space. The first integer is the apartment number and the second integer is the number of people currently living in that apartment.

Output
For each apartment complex, you will output YES if the complex meets the tenant to unit ratio or NO if it does not, a space, and the number of units that are empty.

Example Input File
```
2
8
3 5
2 4
7 0
5 3
8 3
9 5
10 3
14 0
10
101 5
102 4
103 5
104 3
105 5
201 0
202 2
203 5
204 6
205 3
```

Example Output to Screen
```
YES 2
NO 1
```