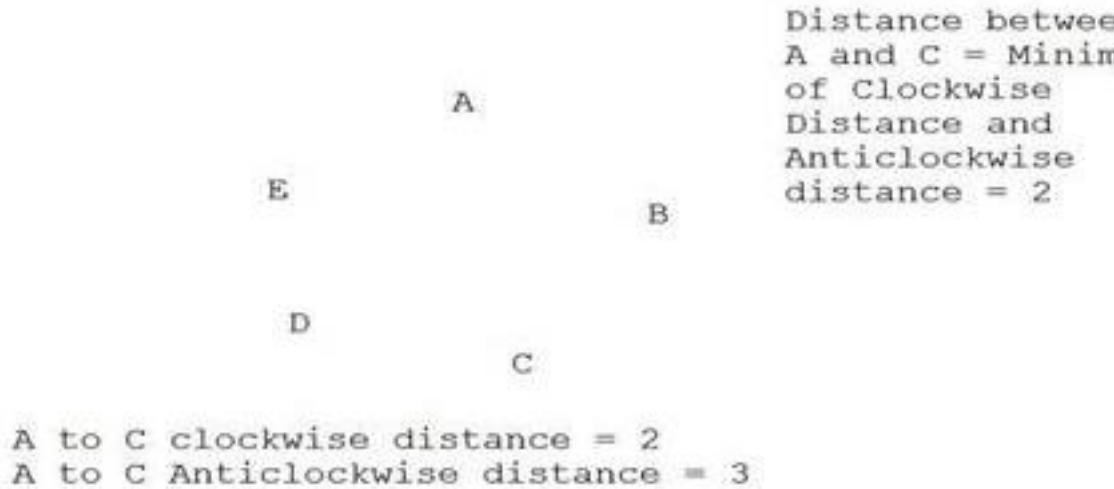


In how many ways you can select  $K$  objects from  $N$  different circularly placed objects such that the selection does not contain any pair of distinct objects having distance less than  $D$  around the circle? Here distance is the minimum of clockwise and anticlockwise distance. Details in following figure:



Here, 5 objects  $\{A, B, C, D, E\}$  are placed circularly. Say,  $K = 2$  and  $D = 2$ , then the 5 possible selections are  $\{A, C\}$ ,  $\{A, D\}$ ,  $\{B, D\}$ ,  $\{B, E\}$ ,  $\{C, E\}$ . A selection is considered to be different from the others if it contains at least 1 object which is not present in the other selection.

### Input

First line of the input contains a positive integer  $T$  ( $T \leq 5000$ ). Each of the following  $T$  lines contains three positive integers  $N$  ( $1 \leq N \leq 1000$ ),  $K$  ( $1 \leq K \leq N$ ) and  $D$  ( $1 \leq D \leq 10$ ), respectively.

### Output

For each case, print a line of the form 'Case  $\langle x \rangle$ :  $\langle y \rangle$ ', where  $x$  is the case number and  $y$  is the number of ways modulo 1000000007 ( $10^9 + 7$ ).

### Sample Input

```
4
5 2 2
5 2 1
3 2 2
10 3 2
```

### Sample Output

```
Case 1: 5
Case 2: 10
Case 3: 0
Case 4: 50
```