

# Bob the builder



Our beloved Bob the builder is back, with his long time colleague Wendy. On his return though, he has noticed that the contractors are pretty clever. They only provide  $N$  bricks to you to build a structure of height  $H$ . On top of that, they impose a condition on you that each layer should have less bricks than the previous layer ( A layer is a valid layer when it has atleast one brick ). It is Bob's job to figure out the minimum number of extra bricks he needs and report that to the contractor quickly or else he would have to pay for the remaining bricks himself. Help Bob figure out how many extra blocks he needs.

## Input Format

The first line contains  $T$ , the number of test cases.  $T$  lines follow, each line contains two integers  $N$  and  $H$ , number of bricks and height of structure respectively.

## Constraints

$N, H \geq 1$

## Output Format

The output contains a single integer denoting the minimum number of extra bricks required to build the structure.

### Sample Input 0

```
1
3 6
```

### Sample Output 0

```
18
```

### Sample Input 1

```
1
3 4
```

### Sample Output 1

```
7
```