

Chef and Candies

There are N children and Chef wants to give them 1 candy each. Chef already has X candies with him. To buy the rest, he visits a candy shop. In the shop, packets containing **exactly** 4 candies are available.

Determine the **minimum** number of candy packets Chef must buy so that he is able to give 1 candy to each of the N children.

Input Format

- The first line of input will contain a single integer T , denoting the number of test cases.
- The first and only line of each test case contains two integers N and X — the number of children and the number of candies Chef already has.

Output Format

For each test case, output the **minimum** number of candy packets Chef must buy so that he is able to give 1 candy to each of the N children.

Constraints

- $1 \leq T \leq 1000$
- $1 \leq N, X \leq 100$

Sample 1:

Input	
Output	
4	2
20 12	0
10 100	1
10 9	3
20 9	

Explanation:

Test Case 1: Chef must buy 2 more packets after which he will have 20 candies which will be enough to distribute 1 candy to each of the 20 children.

Test Case 2: Chef does not need to buy more packets since he already has 100 candies which are enough to distribute 1 candy to each of the 10 children.

Test Case 3: Chef must buy 1 more packet after which he will have 13 candies which will be enough to distribute 1 candy to each of the 10 children.

Test Case 4: Chef must buy 3 more packets after which he will have 21 candies which will be enough to distribute 1 candy to each of the 20 children.