# Problem A: Guessing Game

You and a friend are playing a guessing game. Your friend picks a number between 1 and 1000, and you get three guesses to figure out what it is. For the first two guesses, your friend tells you how far off your guess was. That is, he tells you the difference between his number and your guess. Using the information from the first two guesses, you should be able to correctly guess what your friend's number is.

**Input:**
The first line of the input provides the number of test cases, **T** (1 ≤ **T** ≤ 100). **T** test cases follow. Each test case consists of four lines. The first line contains integer **N** and the second line contains integer **M** (1 ≤ **N, M** ≤ 1000), the number you guessed and by how much your guess was off, respectively. The third and fourth lines each contain one integer, your second guess and by how much it was off respectively.

**Output:**
For each test case, output one integer, your friend's number.

**Sample Input:**

```
2
3
2
7
2
4
3
1
6
```

**Sample Output:**

```
5
7
```

**Explanation of Sample Case:**
In the first test case, your first guess was 3 and your friend says you were off by 2. Your second guess was 7, and your friend says you were again off by 2. The only number that is 2 away from both 3 and 7 is 5, so that must be your friend's number.