

# Easy Measurements

Input file:            **standard input**  
Output file:           **standard output**  
Time limit:            2 seconds  
Memory limit:         512 megabytes

Edward was tasked to measure the pumping rate of two water pumps. To do so, he used the pumps to pump water into a water tank and checked how much water was pumped into the tank in a specific time. He found out that the first pump pumps  $a$  liters of water in  $b$  seconds, and the second pump pumps  $c$  liters of water in  $d$  seconds. He also discovered that when both pumps are used at the same time, together they pump  $b$  liters of water in  $d$  seconds.

Unfortunately, Edward has spilled some water on his records, so now he can't recover the values  $a$  and  $c$ . However, he remembers that these values were positive integers. Now he wonders how many ways are there to choose the values  $a$  and  $c$  that are consistent with his measurements.

## Input

The first line contains an integer  $n$  ( $1 \leq n \leq 1000$ ) — the number of test cases.

Each of the next  $n$  lines contains two integers  $b$  and  $d$  ( $1 \leq b, d \leq 10^9$ ).

## Output

For each test case, output a single integer — the number of ways to choose  $a$  and  $c$ . Output each answer on a separate line.

## Example

standard input	standard output
3	4
9 6	13
40 60	29
60 40	

## Note

In the first test case, the possible values are  $a = 3, c = 7$ ;  $a = 6, c = 5$ ;  $a = 9, c = 3$ ; and  $a = 12, c = 1$ .