

# Problem A

## Almost Prime Numbers

Time Limit: 1 second

Almost prime numbers are the non-prime numbers which are divisible by only a single prime number. In this problem your job is to write a program which finds out the number of almost prime numbers within a certain range.

### Input

First line of the input file contains an integer **N** ( $N \leq 600$ ) which indicates how many sets of inputs are there. Each of the next N lines make a single set of input. Each set contains two integer numbers **low** and **high** ( $0 < \text{low} \leq \text{high} < 10^{12}$ ).

### Output

For each line of input except the first line you should produce one line of output. This line contains a single integer, which indicates how many almost prime numbers are within the range (inclusive) **low...high**.

Sample Input	Sample Output
3 1 10 1 20 1 5	3 4 1

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