Divide

Enter two numbers m and n then calculate the value m/n, where m is the numerator and n is the denominator.

Input

The first line of the input consist of a single integer number t which determines the number of tests.

In each of next t lines there are two number m and n that are separated by a space character.

Constraints

- $0 < t \le 1\,000$

Output

For each test case print out the result of division. Separate your answers with a new line character.

Example

Input:
```
7
5 2
-15 -5
8 4
50 0
7 3
-6 2
18 -3
```

Output:
```
2.5
3
2
denominator cannot be zero
2.333333
-3
-6
```