Ternary Calculation

Time Limit: 2000 ms   Memory Limit: 65536 KB

Complete the ternary calculation.

Input

There are multiple test cases. The first line of input contains an integer T indicating the number of test cases. For each test case:

There is a string in the form of "$number_1$ $operator_a$ $number_2$ $operator_b$ $number_3$". Each operator will be one of {'+', '-' , '*', '/', '%'}, and each number will be an integer in [1, 1000].

Output

For each test case, output the answer.

Sample Input

```
5
1 + 2 * 3
1 - 8 / 3
1 + 2 - 3
7 * 8 / 5
5 - 8 % 3
```

Sample Output

```
7
-1
0
11
3
```

Note

The calculation "A % B" means taking the remainder of A divided by B, and "A / B" means taking the quotient.

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