

Q1.

Input Format

The input begin with an integer n on a line, which means that there are n test cases. And the first character of each following row is the command.

- `+` : add two complex numbers
- `*` : Multiply two complex numbers
- `p` : print the complex number

Each complex number contains two float, the first one is real part and the second is imaginary part.

Constraints

Use **class** and **switch** to implement.

Hint: For C++ 11, you can simply convert a float to a string by using `std::to_string()`

For example

```
float f = 1.23f;
```

```
string str = std::to_string(f);
```

```
then you get str = "1.230000"
```

Output Format

You will output the complex numbers in string.

Sample Input

```
7
p 0 0
p 0 1.55
p 1.55 0
p 2.5 1.23
p -2.001 1.338
+ 2.5 1.23 -2.2 1.3
* 2.5 5.2 4 1
```

Sample Output

```
0.000000
1.550000i
1.550000
2.500000+1.230000i
```

-2.001000+1.338000i

0.300000+2.530000i

4.800000+23.299999i