

Simple Calculator

Mr. Puede is in a problem, he need your help to write down a calculator program to read the input and output the calculator result.

Input

The input begins with the number of testcase T ($1 \leq T \leq 100$). Each testcase containing notation expression with maximum length 500 characters. There is only 1 digit number written in the notation expression and there is only 5 operators ($^ * / + -$) in the notation expression.

Output

Print exactly one number each testcase the result of the notation expression. Use 2 digit decimal number if the output is a fraction number. Only the final result can formed as fraction, negative or > 1 digit number.

Example

Input:

2

9/3+8*2

2^3/4+8

Output:

19

10