Penalty

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

As we all know, in the ICPC series of events, a very important standard for ranking is penalty time. Zag, a new engineer, has developed an evaluation system. The calculation method of penalty time of the system is as follows:

1. For each accpeted submission, the system will record the first passing time as A and the submission times that failed before as B, to generate the corresponding string `A + B`, and the corresponding contribution is $A + B \times 20$.

2. For other failed submissions, the system will record the number of failed submissions as C, generate a string `-C`, and the corresponding contribution is 0.

Now Zag has developed the function of generating string. He hopes you can help him implement the function of calculating the corresponding contribution through the string generated by the system.

Input

The first line contains only an integer $n(1 \le n \le 20)$, which indicates the number of strings generated.

From line 2 to line $n + 1$, each line is a string in the same format as the topic description, that is, the shape is `A + B` or `-C`$(0 \le A, B, C \le 300)$.

Output

Output n lines, one integer per line, the corresponding penalty.

Example

standard input	standard output
5	16
16+0	560
160+20	0
-3	375
255+6	0
-0	