Arithmetic Evaluation

Evaluate a parenthesized expression of single-digit positive integers and the binary operators +, -, *.

The order of operations differs from the canonical one in that operations have no precedence; they are simply evaluated from left-to-right, with only parentheses affecting the order of evaluation.

Every intermediate step is guaranteed to have absolute value no greater than 1,000,000,000.

Input:

Input is an arithmetic expression of single-digit positive integers, the binary operators +, -, * and parentheses (). The arithmetic expression will be well-formed and will have no spaces.

Output:

The evaluated value of the arithmetic expression.

Example Input 1: Example Input 2: Example Input 3:

Example Output 1: Example Output 2: Example Output 3:

3 4 25