

# Lannisters of Justice (300 points)

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## Introduction

You are an entry level hero and your first task from the Lannisters of Justice is to break into the throne room of the Mad Mathemagician. The only issue is that his throne is guarded by a numeric password that is solved by following a specific ordering of operations on an expression.

No one before you was successful, but that was because they didn't figure out that the Mathemagician followed his own Mad order of operations; he ordered it by the amount of strokes it took his iron pen to write the operators. The ordering you have deduced (from first to last) is: subtraction( - ), division( / ), addition( + ), multiplication( \* )

## Input Specifications

You will be given a single line of character input of no more than 100 characters that is a valid math expression using integers and math operations. Example could be something as simple as  $3+4$  or something a little more complex, such as  $3*4+12/6$ . Your input will only contain the 4 operators and numbers, no other characters.

## Output Specifications

You will need to output the solution to the equation when applying the Mathemagician's order of operations. All output will be a **single integer value**.

## Sample Input/Output

### Input

16-4\*2

### Output

24

### Explanation

Subtraction happens before multiplication, so the calculation is  $16-4 = 12$ , then  $12 * 2 = 24$ , which is the solution.

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### Input

2+3\*24/6-2/3

### Output

10

### Explanation

First you take  $6 - 2 = 4$ . Then,  $24/4 = 6$  and  $6/3 = 2$ , so now the expression is  $2 + 3 * 1$ . Addition is next, so  $2 + 3 = 5$ , so you get  $5 * 2 = 10$