

Infix notation: 23*42-/56*+

	Walker	Value Stack	Operand 1	Operand 2	Calculation operand 1&2
1	2	2			
2	3	2 3			
3a	*		2	3	2 * 3 = 6
3b		6			
4	4	6 4			
5	2	6 4 2			
6a	-	6	4	2	4 - 2 = 2
6b		6 2			
7a	/		6	2	6 / 2 = 3
7b		3			
8	5	3 5			
9	6	3 5 6			
10a	*		5	6	5 * 6 = 30
10b		3 30			
11a	+		3	30	3 + 30 = 33
11b		33			
12		Return 33			

- 0. Setup walker, value stack, operand 1, Operand 2.
 - a. The walker iterates the given string and evaluates it as a variable or character operator to perform the next operation.
 - b. The value stack is a return value as a calculation result of infix notation.
 - c. The operand 1 is a peek variable from the value stack.
 - d. The operand 2 is another peek variable from the value stack.
- 1. The walker is "2"

It goes to the value stack since it is a variable.

2. The walker is "3"

It goes to the value stack since it is a variable.

- 3. The walker is "*"
 - a. Get peek (3) and set it to operand 2 and pop value stack. Get peek (2) and set it to operand 1 and pop value stack.
 - b. Calculate operand 1 (2) and operand 1 (3) with walker (*).The result will be 6 as shown in the column.It is pushed to the value stack.
- 4. The walker is "4"

It goes to the value stack since it is a variable.

5. The walker is "2"

It goes to the value stack since it is a variable.

- 6. The walker is "-"
 - a. Get peek (2) and set it to operand 2 and pop value stack. Get peek (4) and set it to operand 1 and pop value stack.

b. Calculate operand 1 (4) and operand 2 (2) with walker (-) The result will be 2 as shown in the column. It is pushed to the value stack.

7. The walker is "/"

- a. Get peek (2) and set it to operand 2 and pop value stack. Get peek (6) and set it to operand 1 and pop value stack.
- b. Calculate operand 1 (6) and operand 2 (2) with walker (/)The result will be 3 as shown in the column.It is pushed to the value stack.
- 8. The walker is "5"

It goes to the value stack since it is a variable.

9. The walker is "6"

It goes to the value stack since it is a variable.

10. The walker is "*"

- a. Get peek (6) and set it to operand 2 and pop value stack. Get peek (5) and set it to operand 1 and pop value stack.
- b. Calculate operand 1 (5) and operand 1 (6) with walker (*).The result will be 30 as shown in the column.It is pushed to the value stack.

11. The walker is "+"

- a. Get peek (30) and set it to operand 2 and pop value stack. Get peek (3) and set it to operand 1 and pop value stack.
- b. Calculate operand 1 (3) and operand 2 (30) with walker (+)The result will be 33 as shown in the column.It is pushed to the value stack.
- 12. Return value stack peek as a total calculation result.