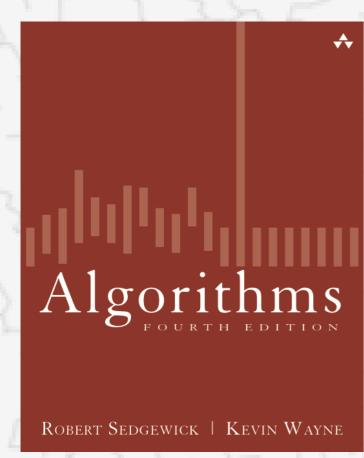
Algorithms



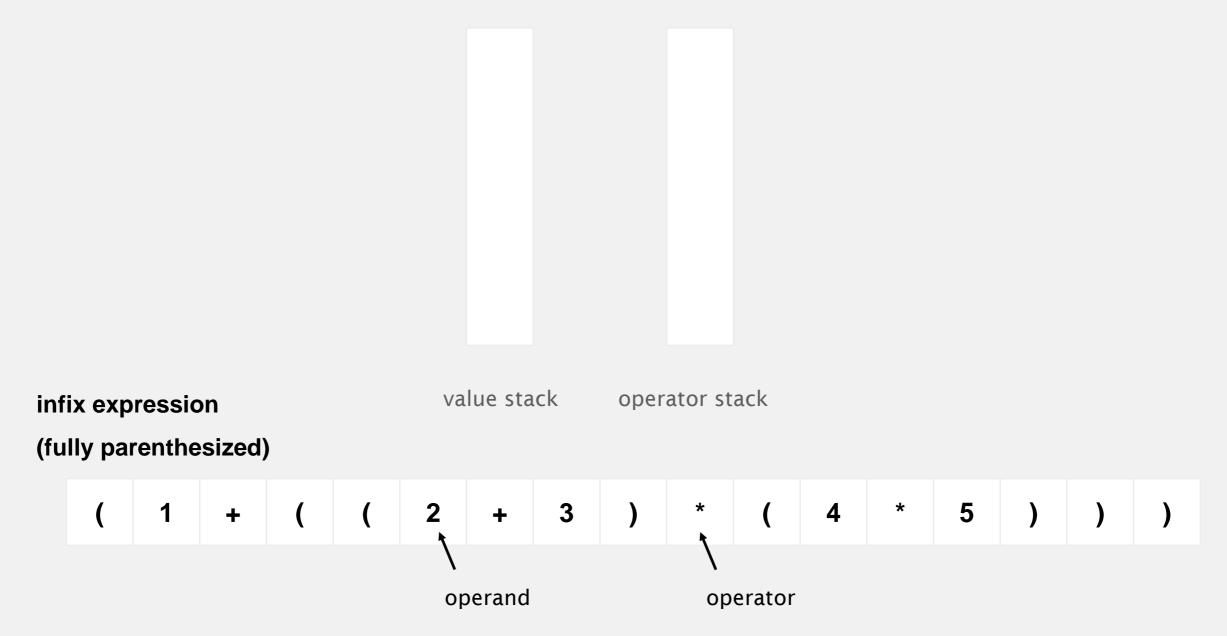
http://algs4.cs.princeton.edu

1.3 DIJKSTRA'S 2-STACK DEMO

Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

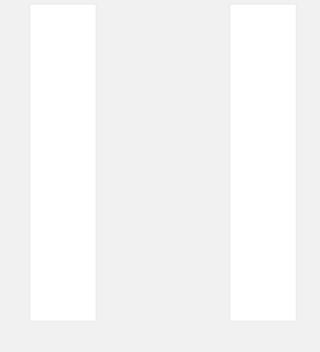


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.



value stack

operator stack

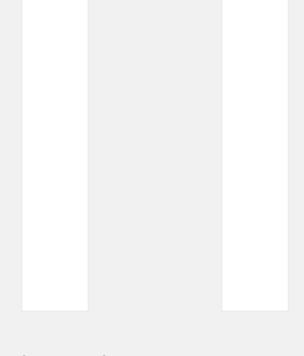


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.



value stack

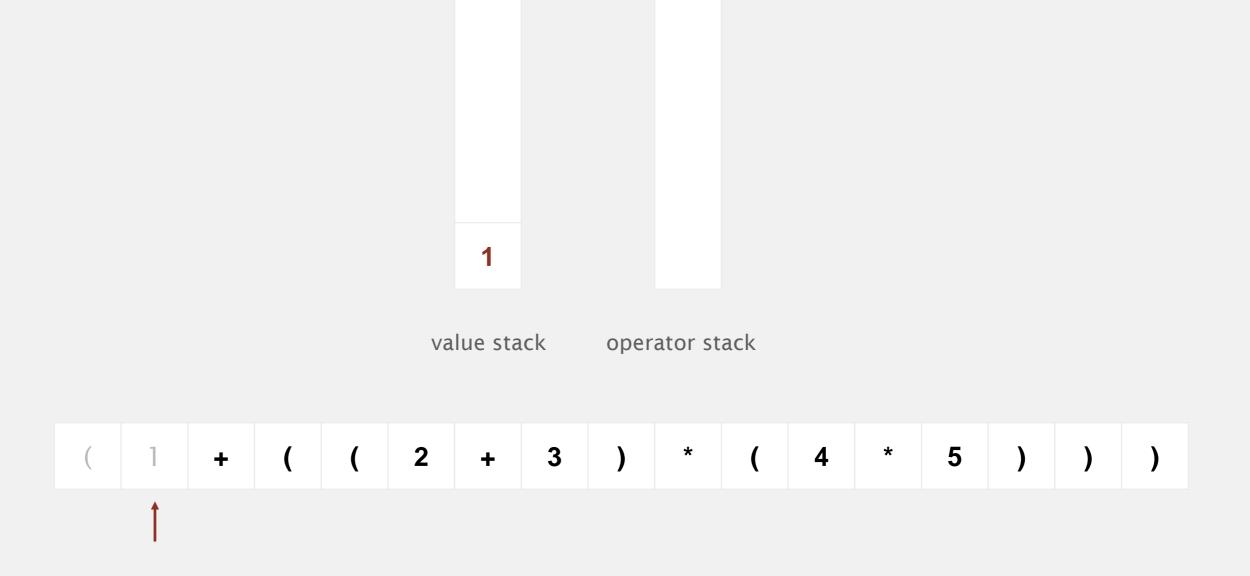
operator stack

(1 + (2 + 3) * (4 * 5))

Value: push onto the value stack.

Operator: push onto the operator stack.

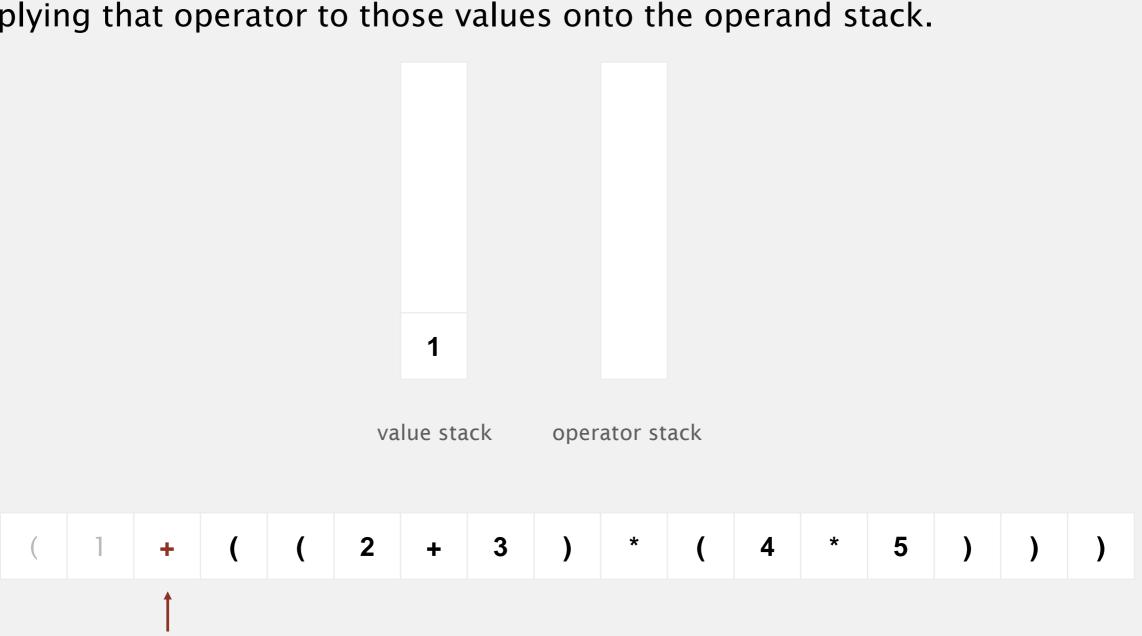
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

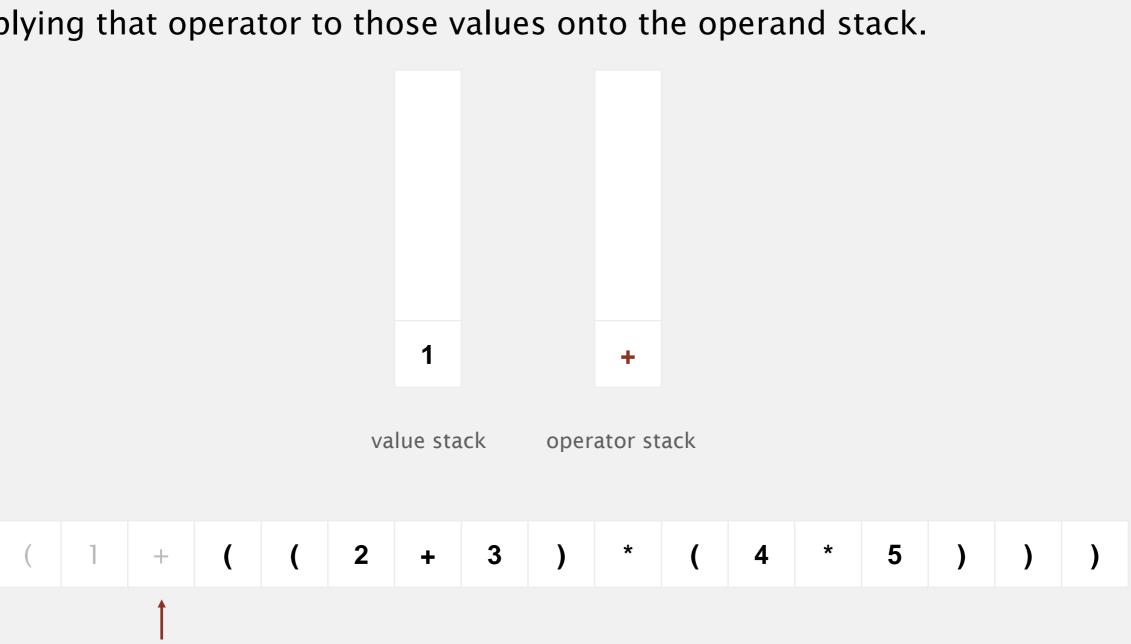
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

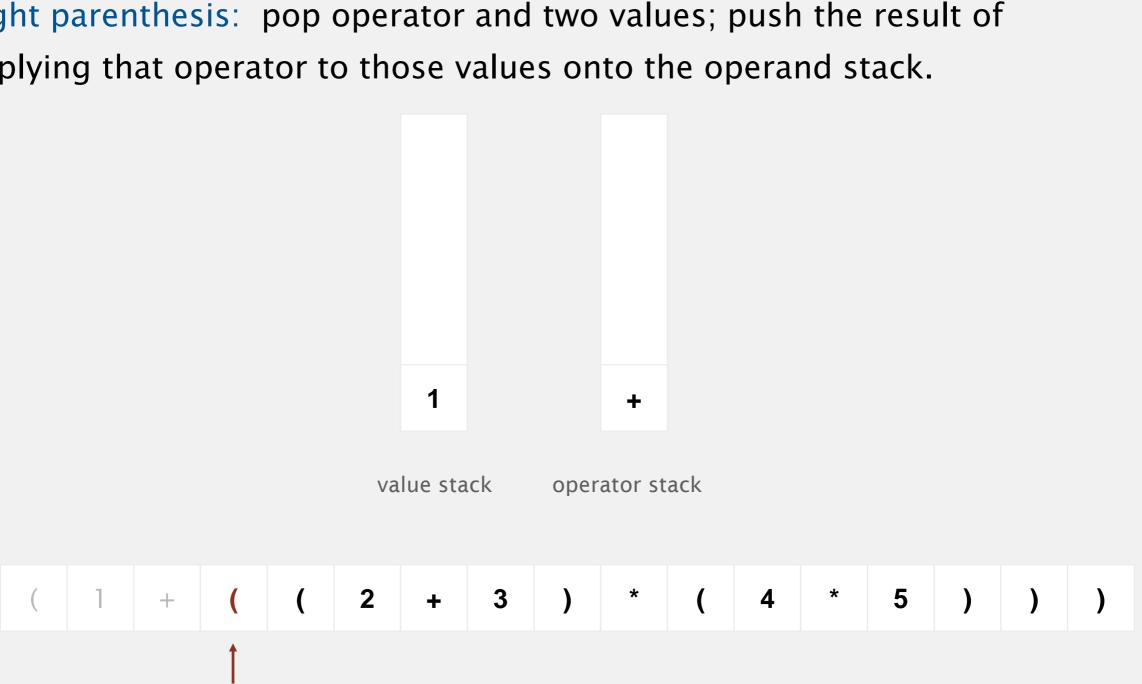
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

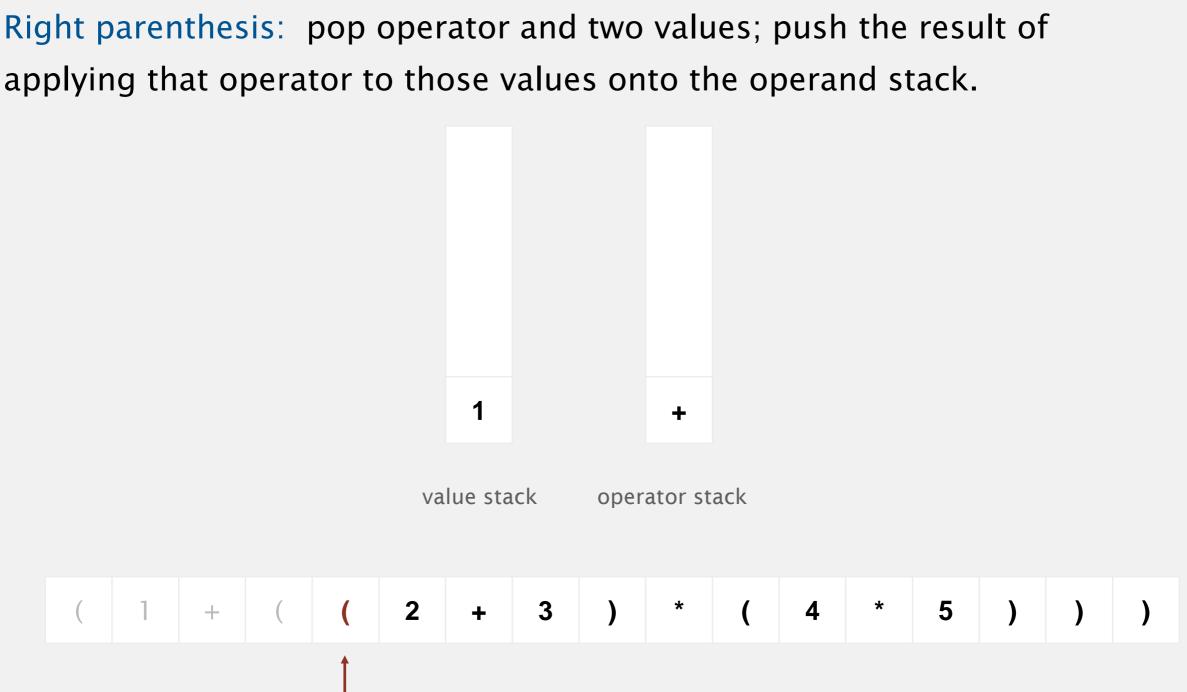


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

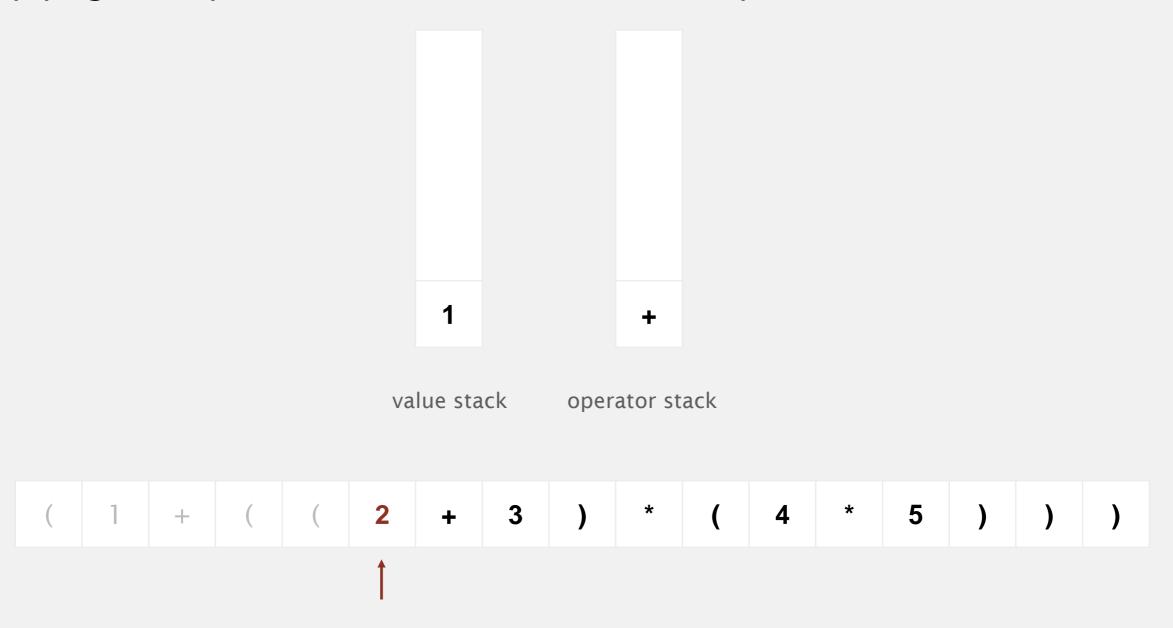
applying that operator to those values onto the operand stack.



Value: push onto the value stack.

Operator: push onto the operator stack.

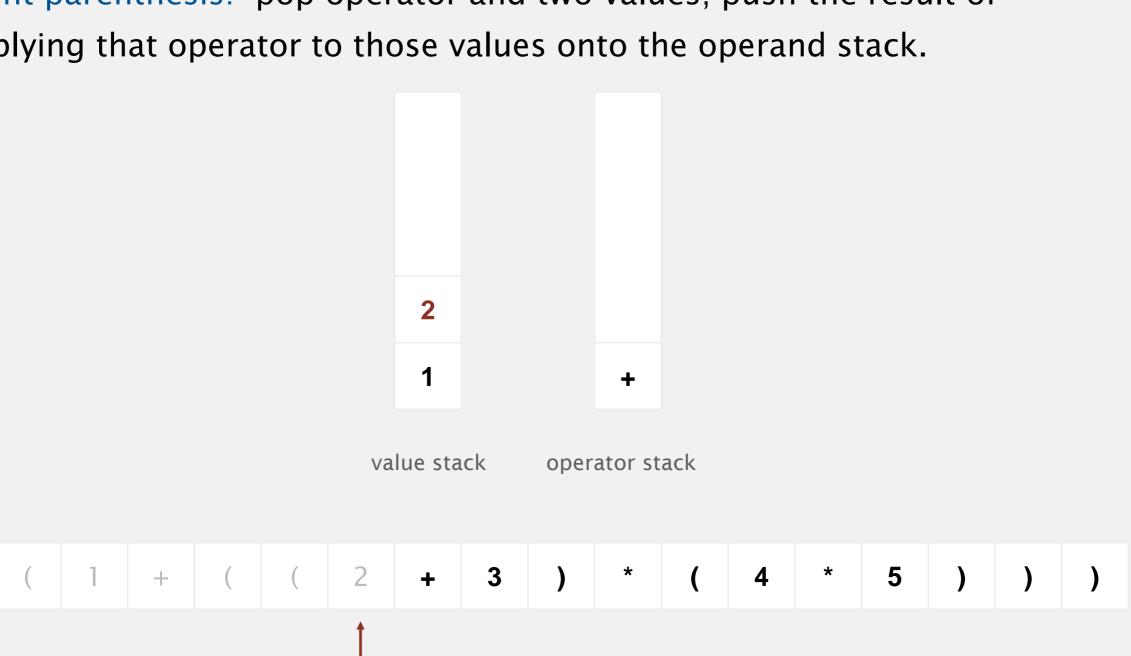
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

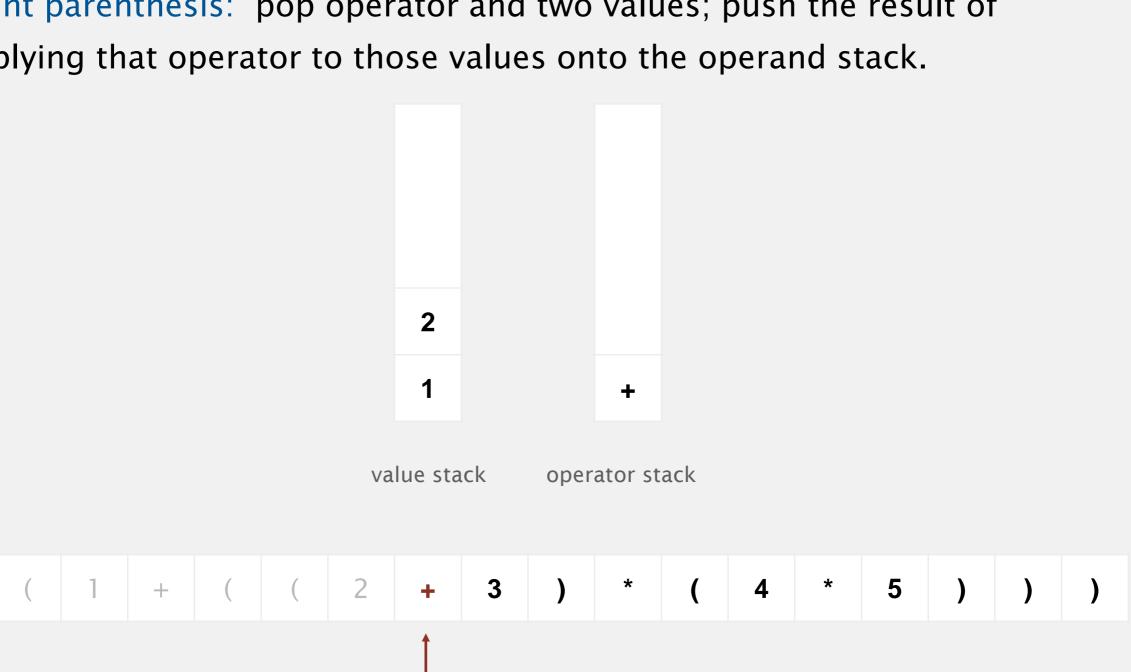
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

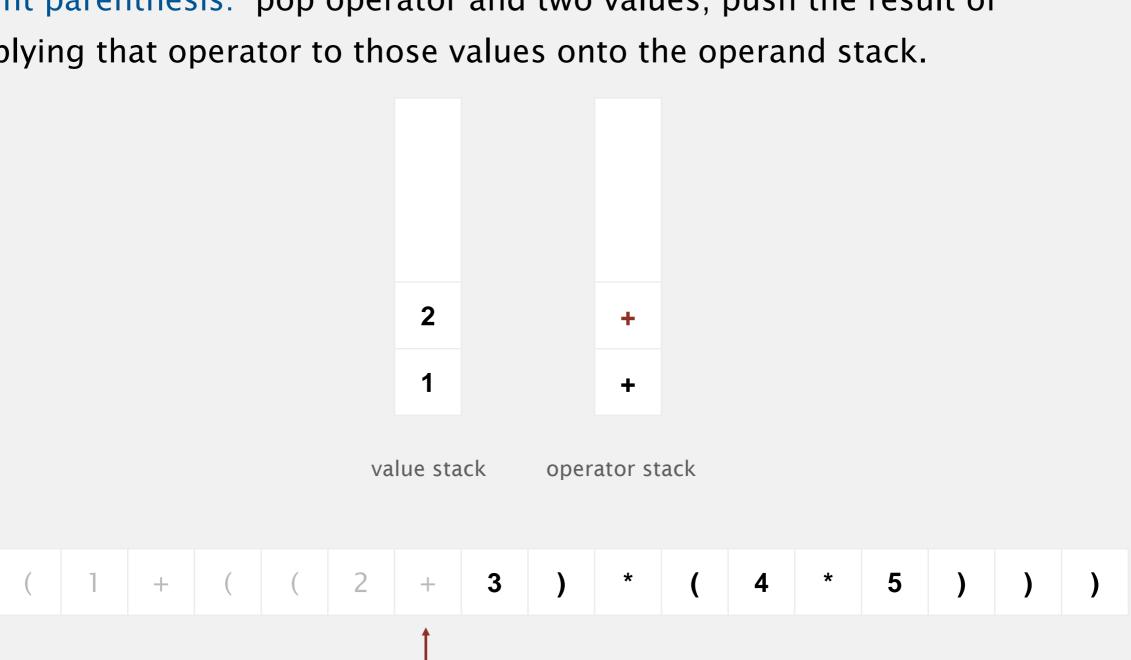
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

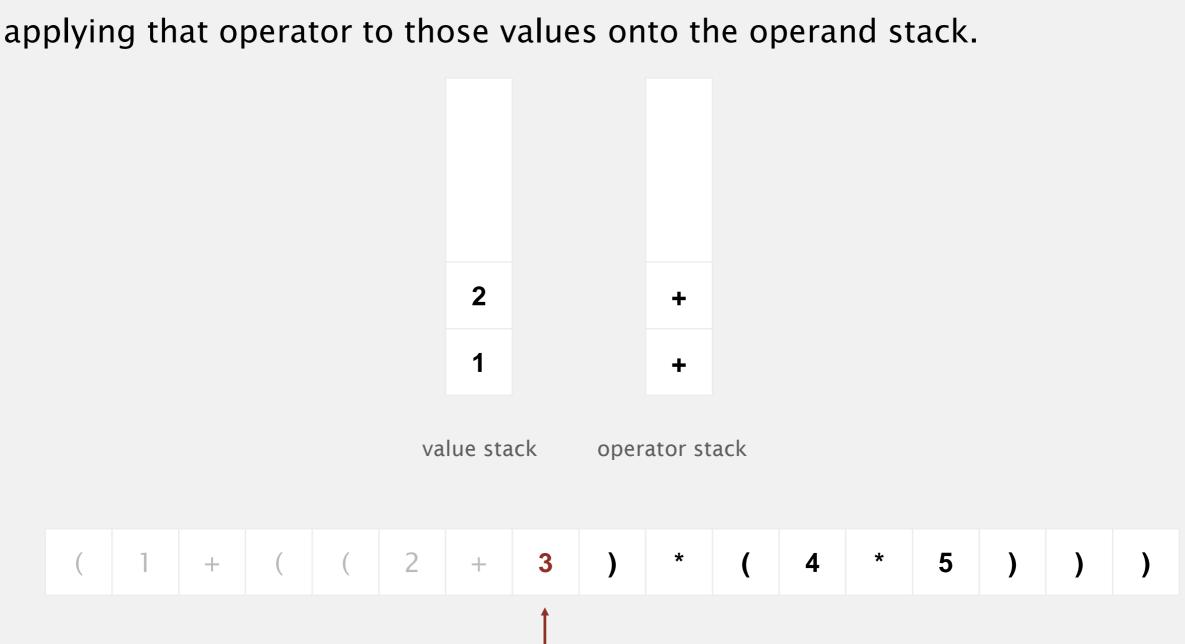


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

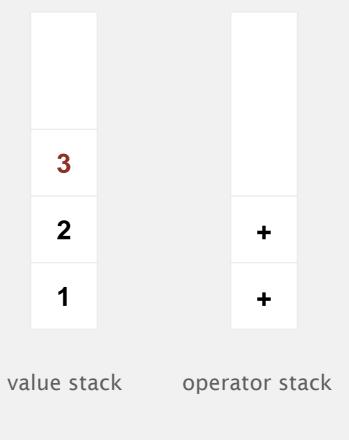
Right parenthesis: pop operator and two values; push the result of



Value: push onto the value stack.

Operator: push onto the operator stack.

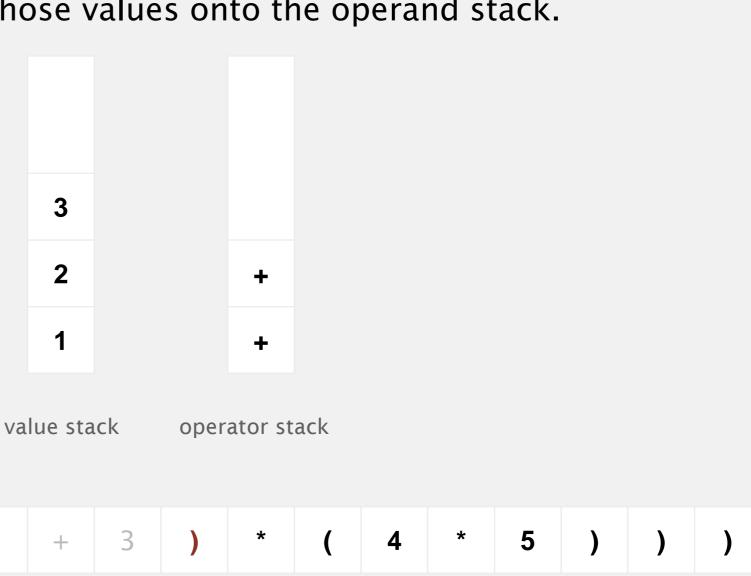
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

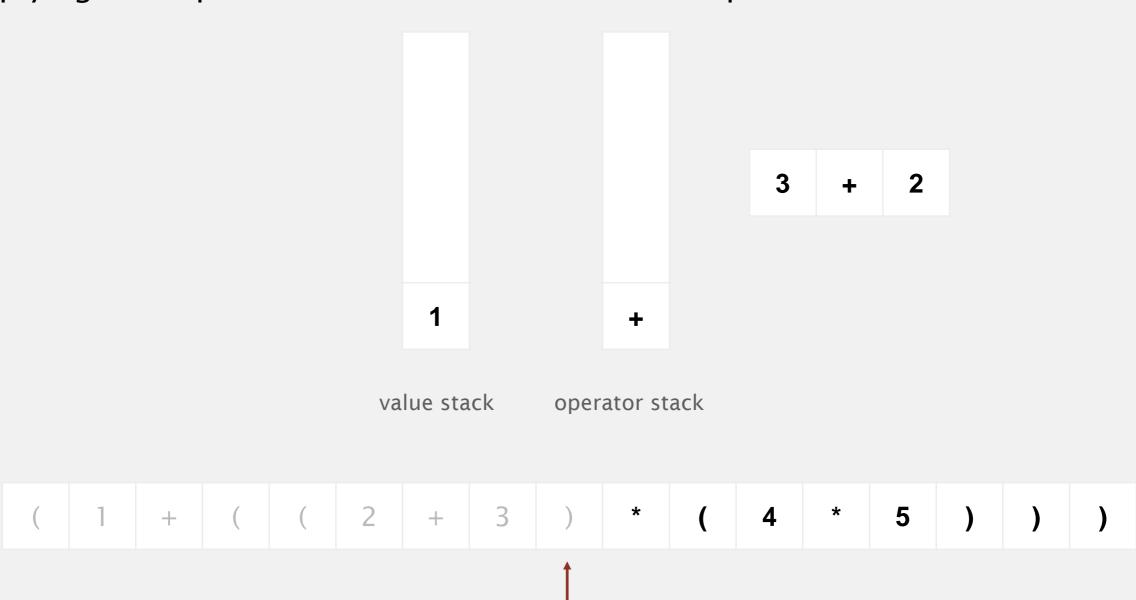
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

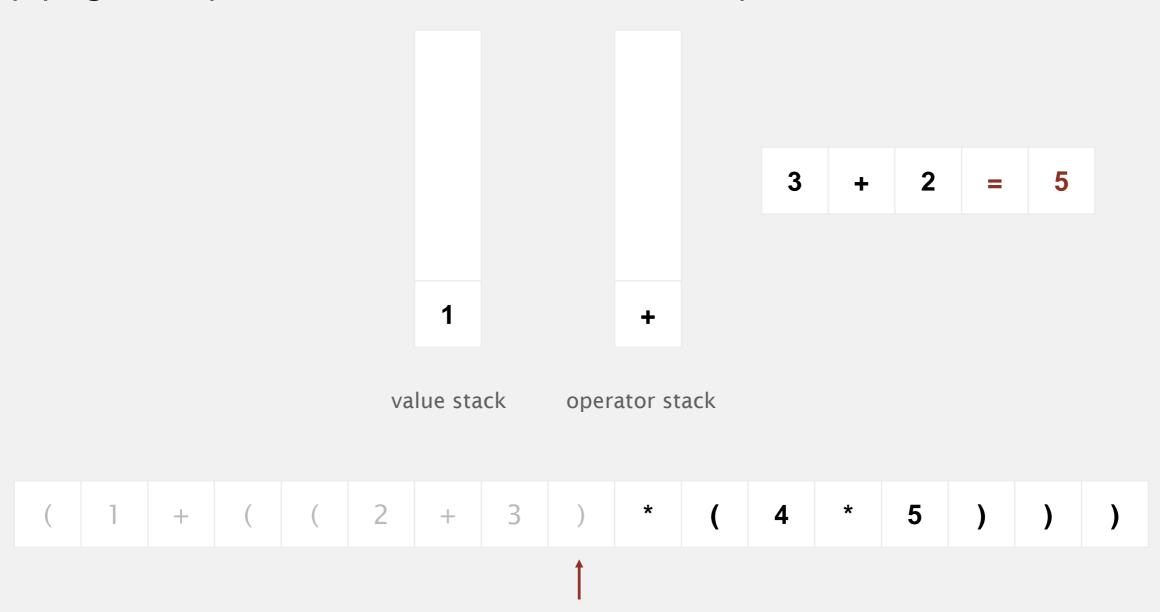
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

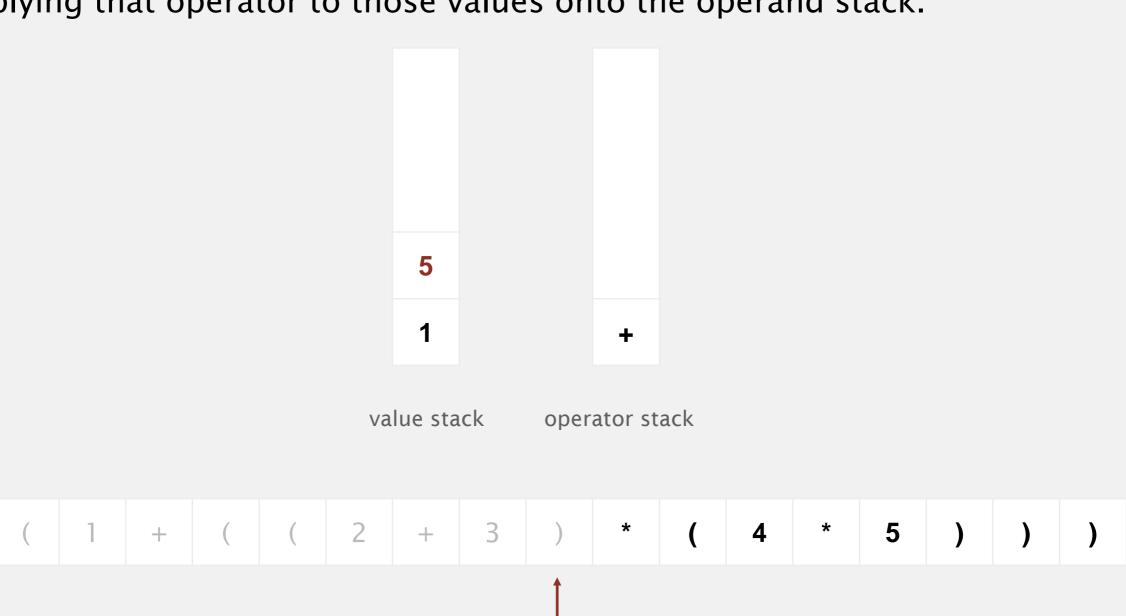
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

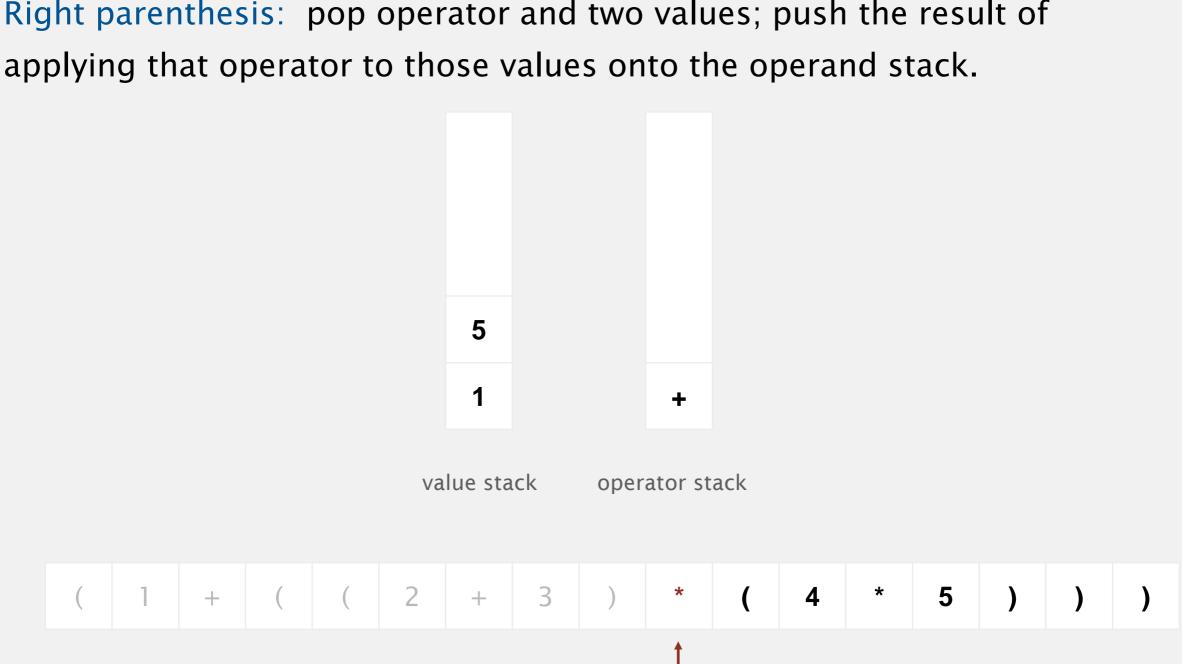


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

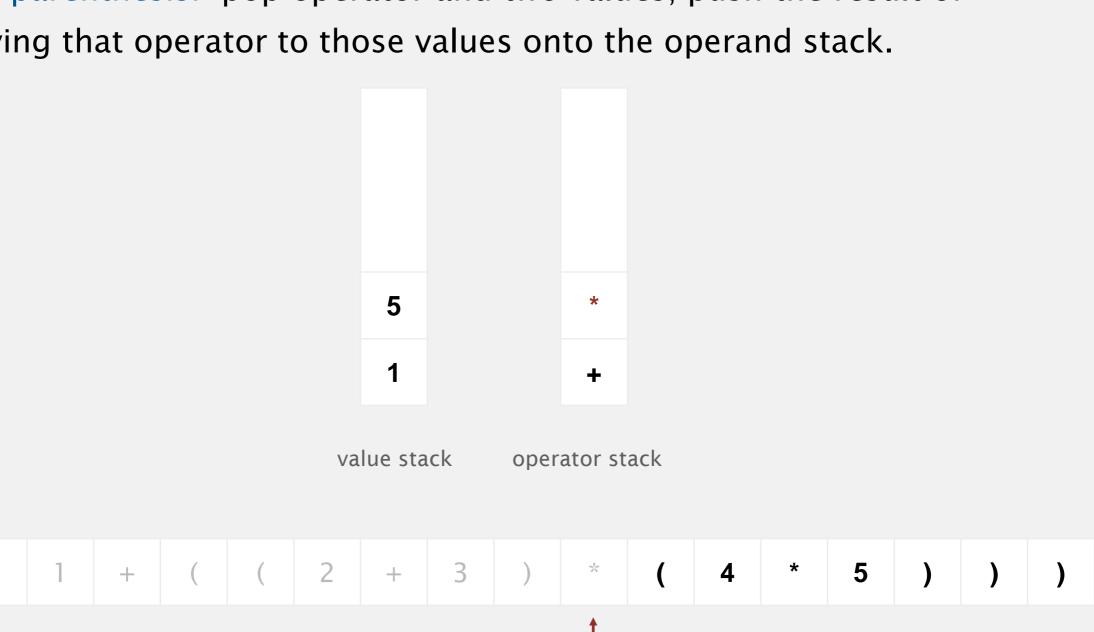
Right parenthesis: pop operator and two values; push the result of



Value: push onto the value stack.

Operator: push onto the operator stack.

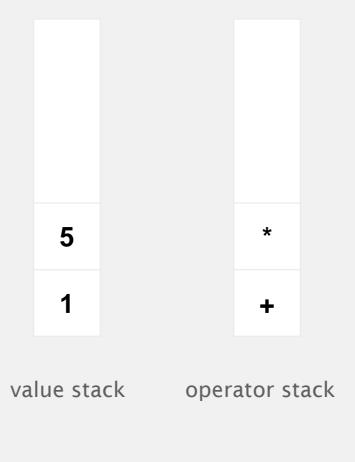
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

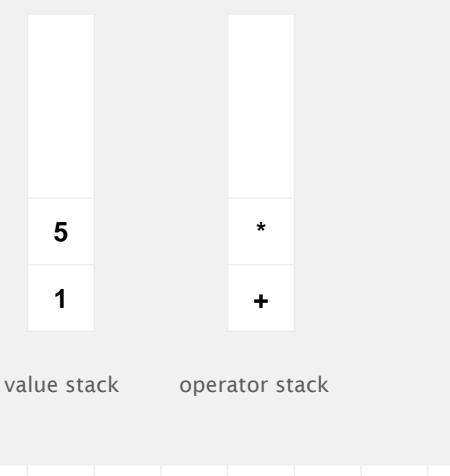
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

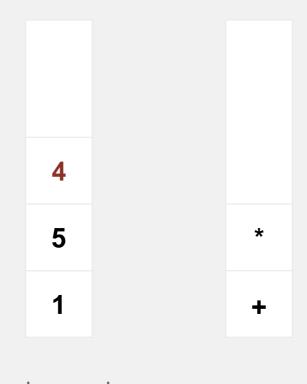


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.

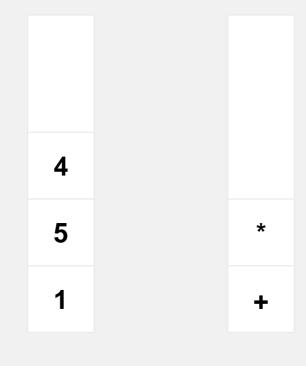


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.

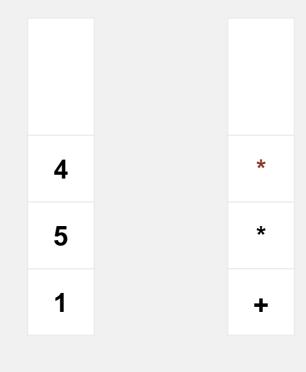


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

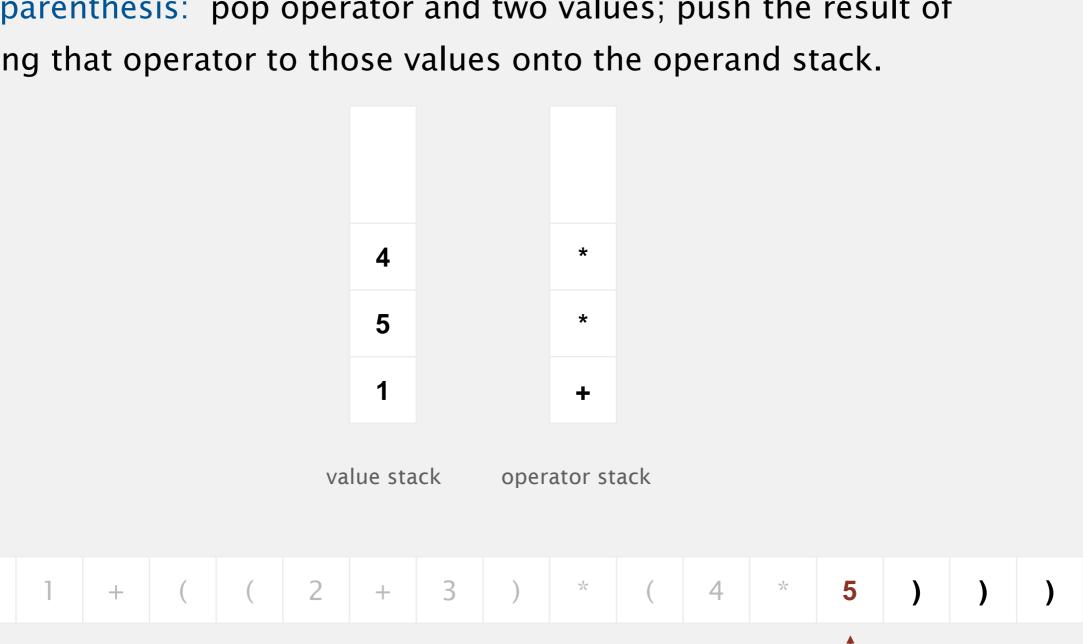
Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.



Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

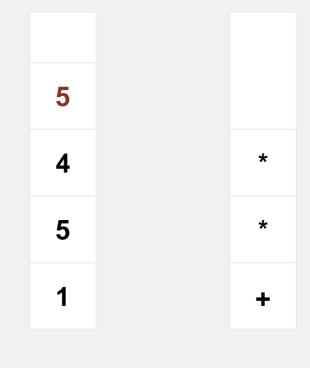


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.

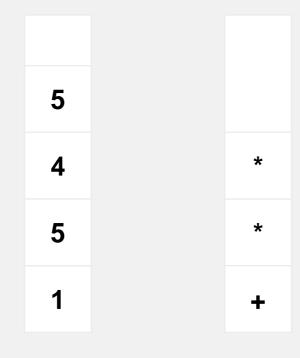


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

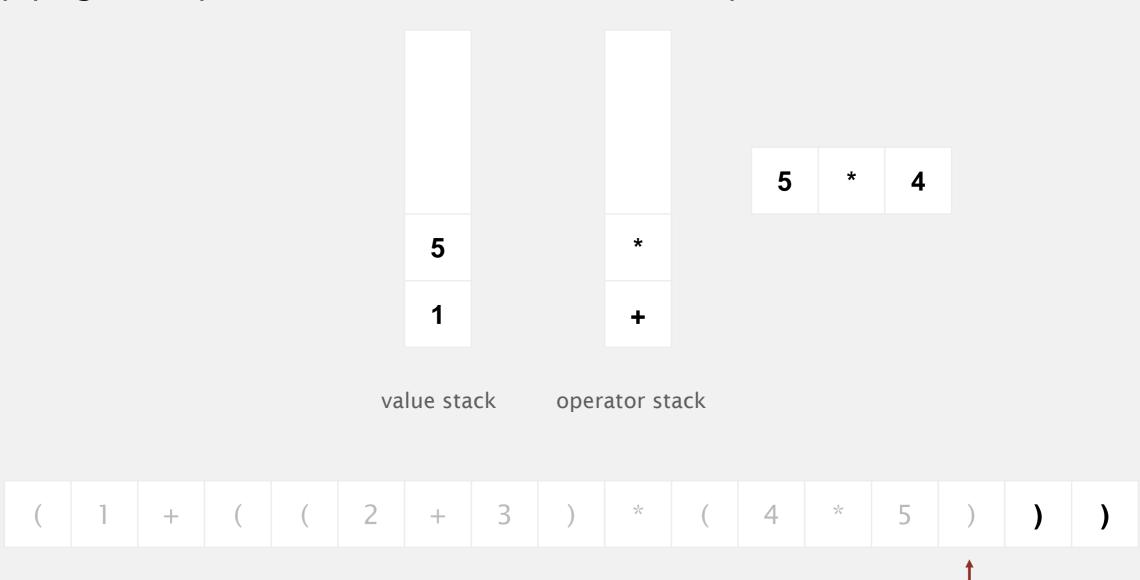
Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.



Value: push onto the value stack.

Operator: push onto the operator stack.

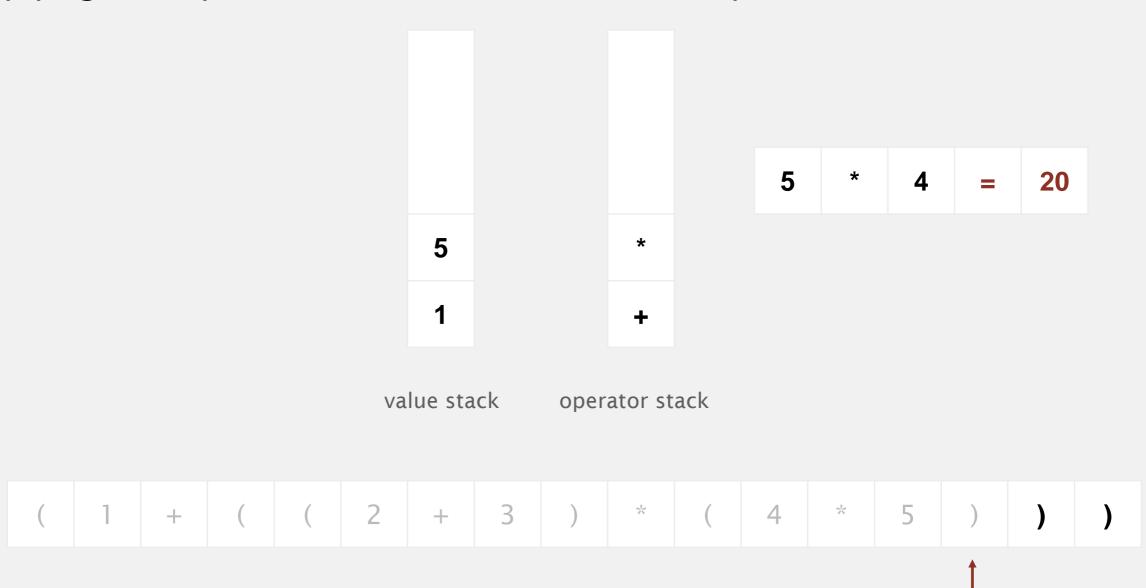
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

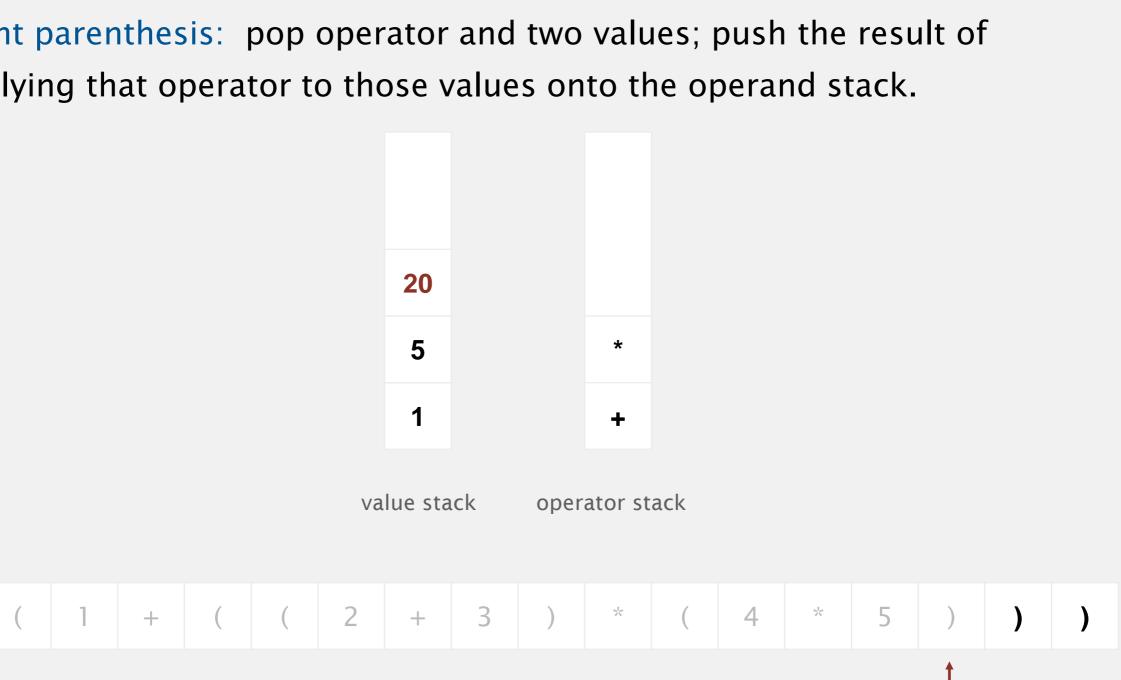
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

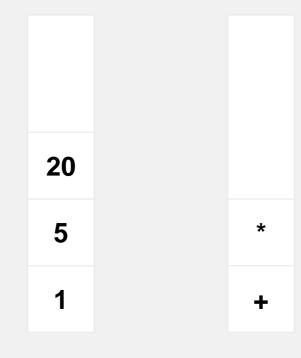


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

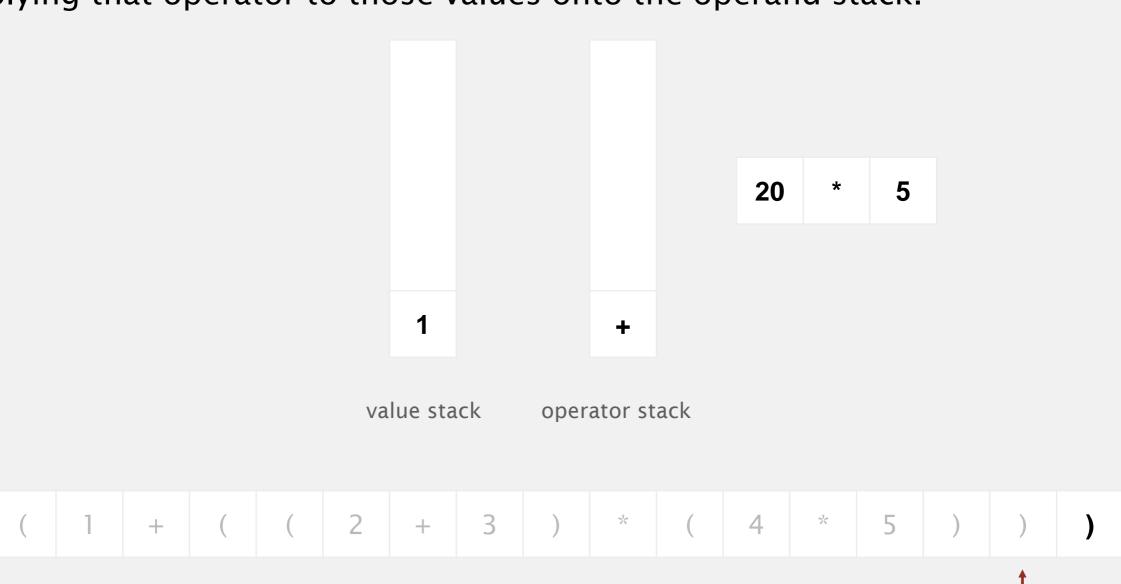
Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.



Value: push onto the value stack.

Operator: push onto the operator stack.

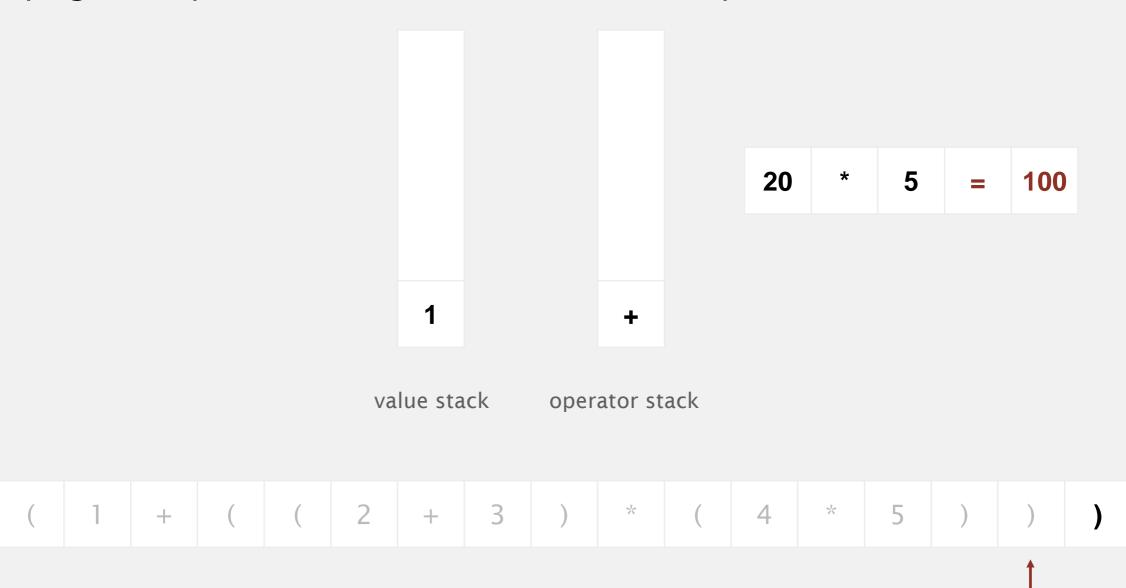
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

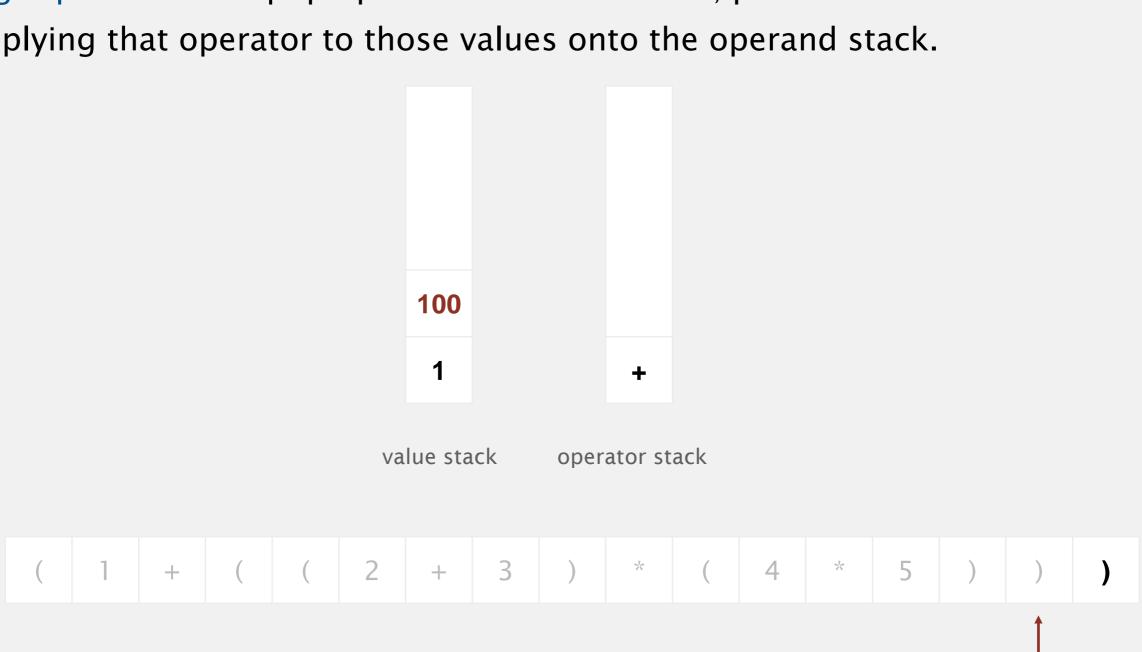
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

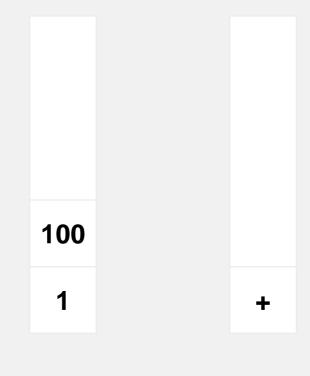


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.



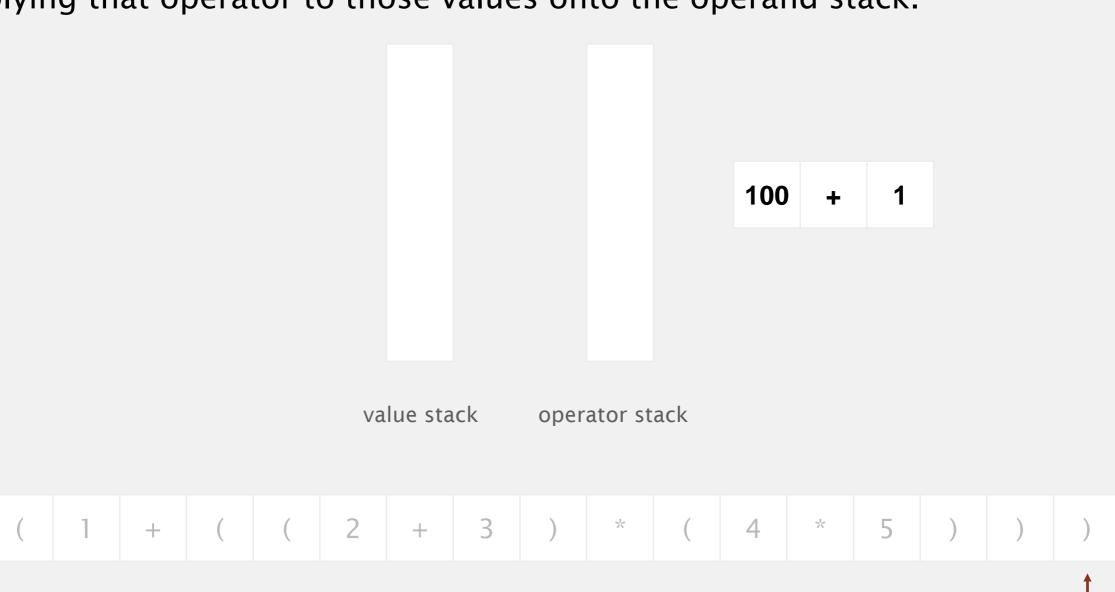
value stack operator stack

(1 + (2 + 3) * (4 * 5))

Value: push onto the value stack.

Operator: push onto the operator stack.

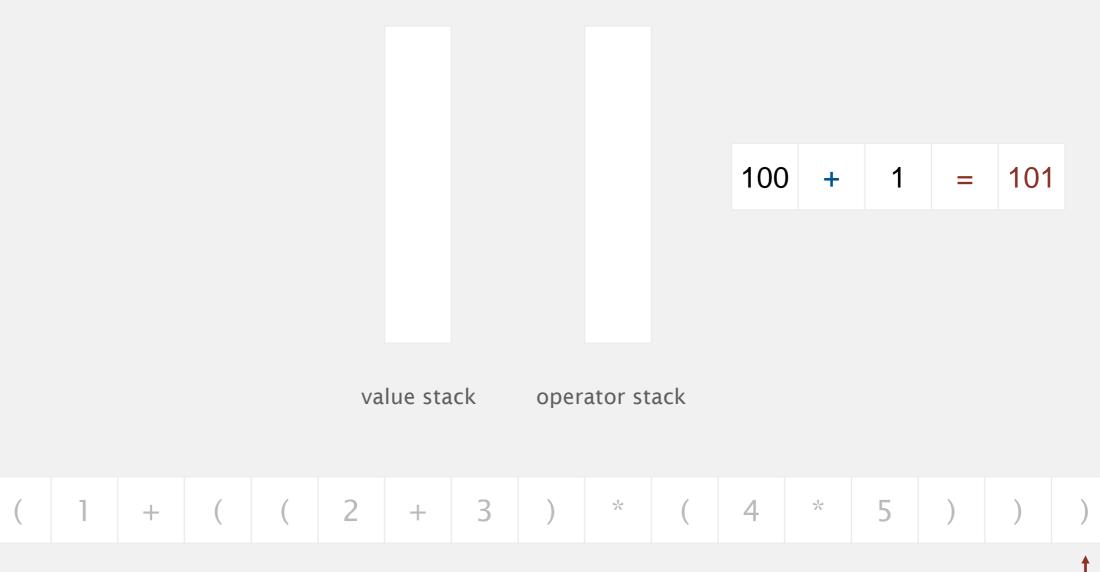
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

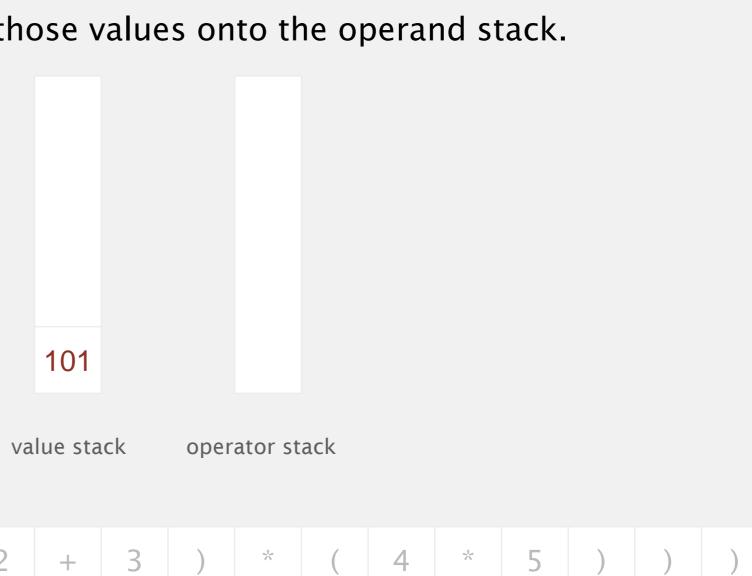
Left parenthesis: ignore.



Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

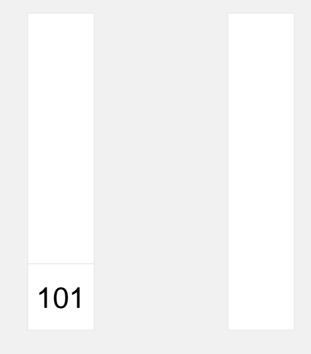


Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.



value stack o

operator stack

Value: push onto the value stack.

Operator: push onto the operator stack.

Left parenthesis: ignore.

Right parenthesis: pop operator and two values; push the result of applying that operator to those values onto the operand stack.

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result