

Trace table for the expression  $5\ 6\ *\ 2\ 4\ ^\ 3\ +\ +$  (from part A first test)

Step	value	action	Initial stack value	Value after step in stack
1	5	Push to stack	empty	[5]
2	6	Push to stack	5	[5,6]
3	*	*Pop 6 and 5 then push 30	[5,6]	[30]
4	2	Push to stack	[30]	[30,2]
5	4	Push to stack	[30,2]	[30,2,4]
6	^	Pop 4 and 2 then push 16	[30,2,4]	[30,16]
7	3	Push to stack	[30,16]	[30,16,3]
8	+	Pop 3 and 16 then push 19	[30,16,3]	[30,19]
9	+	Pop 19 and 30 then push 49	[30,19]	[49]

\*in steps where it sees an operator the appropriate calculation is performed then the result is pushed back

Same expressions calculated with the java program

```

Main x
C:\Users\Manu\.jdk\openjdk-25\bin\java.exe "-javaagent:C:\Program File
Enter RPN expression:
5 6 * 2 4 ^ 3 + +
49.0

Process finished with exit code 0
|

```