

3) (5 pts) DSN (Stacks)

Convert the following infix expression to postfix using a stack. Show the contents of the stack at the indicated points (1, 2, and 3) in the infix expression.

$$A + (B - \overset{1}{\quad} C * (D + \overset{2}{\quad} E)) - \overset{3}{\quad} F * G$$

-
(
+

1

+
(
*
-
(
+

2

-

3

Resulting postfix expression:

A	B	C	D	E	+	*	-	+	F	G	*	-						
---	---	---	---	---	---	---	---	---	---	---	---	---	--	--	--	--	--	--

Grading: 1 point for each stack, 2 points for the whole expression (partial credit allowed.)