

3) (5 pts) ALG (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.

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

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Resulting postfix expression:

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| A | B | C | D | - | * | + | E | F | / | G | + | + | H | + | | | | | |
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Grading: 1 point for each stack, 2 points for the whole expression (partial credit allowed.)