3) (10 pts) ALG (Stacks)

Use a stack to convert the following infix expression to a postfix expression. Please show the state of the stack at the exact point in time when the algorithm reaches the marked locations (A, B, C, and D) while processing the expression.

```
                    A           B           C                 D
8  *  3  /  2  +  9  -  6  +  (  3  -  (  8  *  2  )  +  7  )
```

A	B	C	D
		(	
		-	+
		(	(
+	+	+	+

Equivalent Postfix Expression:

8 3 * 2 / 9 + 6 - 3 8 2 * - 7 + +

Grading: 1 pt for each stack, 6 pts for the expression (take off 1 pt per error in the expression, capping at 6)