3) (10 pts) ALG (Stacks)
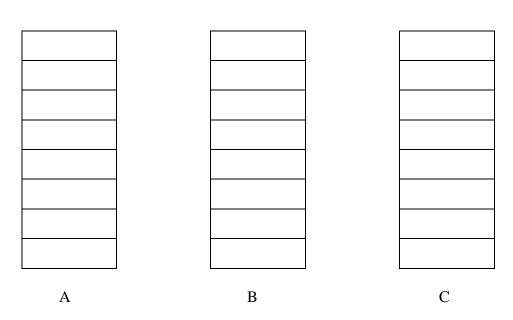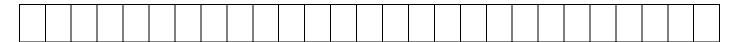
Convert the following infix expression to postfix using a stack. Show the contents of the stack at the indicated points (A, B, and C) in the infix expression.

<div style="text-align:center">

A   B   C
```
3 + 1 – 7 * (4 / 2 + 5) * 8 – 7 / (5 – 3 + (5 + 7) / (3 * 2))
```

</div>

A   B   C

Note: A indicates the location in the expression **AFTER** the multiplication and before the open parenthesis. B indicates the location in the expression **AFTER** the subtraction and before the value 3. C indicates the location in the expression **AFTER** the division and before the open parenthesis.

Resulting postfix expression:

Note: There are exactly the correct number of boxes above. These should be filled with 14 numbers and 13 operators.