**3)** (5 pts) ALG (Stacks)
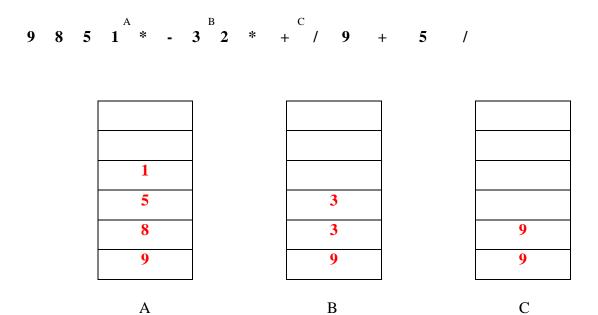
Evaluate the following postfix expression, showing the state of the stack at each of the indicated points.

$$\overset{A}{9 \quad 8 \quad 5 \quad 1 \quad *} \quad - \quad \overset{B}{3 \quad 2 \quad *} \quad + \quad \overset{C}{/} \quad 9 \quad + \quad 5 \quad /$$

| A |
|---|
|   |
|   |
| **1** |
| **5** |
| **8** |
| **9** |

| B |
|---|
|   |
|   |
|   |
| **3** |
| **3** |
| **9** |

| C |
|---|
|   |
|   |
|   |
|   |
| **9** |
| **9** |

A            B            C

Value of the Expression: **2**

**Grading: 1 pt for each stack (must be correct to get point), 2 pts for the final answer (no partial)**