

Answer the following showing detailed, incremental steps. Circle your final answer.

1. Simplify $\overline{(\overline{A + B})} A$

2. Simplify $A(\overline{B} + C) + B(A + \overline{C}) + C(\overline{A} + B)$

3. Simplify $\overline{B} \overline{A} + \overline{A}(B + C)$

4. Simplify $C(A + B) + \overline{C}(A + B)$