1) Determine the logic table for the given circuit.

- If A is + AND B is -
  - Current flows through left branch
- No current through right branch

\[ \Rightarrow V_{out} = V_+ \]

- If A is - AND B is +
  - Current flows through right branch
- No current through left branch

\[ \Rightarrow V_{out} = V_+ \]

- If A and B both + or -
  - No current flows

\[ \Rightarrow V_{out} = 0 \]