Understanding Mixed Logic

Part A You have obtained the following schematics with no description of their operation. Fortunately, the designer used a mixed logic design strategy. Determine the logical function computed by the circuit.

\[ F_{(A,B,C,D,E)} = \overline{(A + B)(C + \overline{D}) + (C + D)} + E \]

Part B How many transistors are required for the circuit implementation in Part A?

number of transistors = 26

Part C Now change the implementation to use OR and NOT gates. Accomplish this only by adding or removing inverters and changing bubble pairs. Don’t use unnecessary inverters.