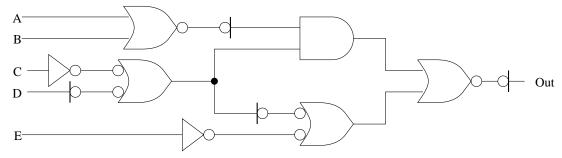
## Understanding Mixed Logic

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.



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

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.

