Mixed Logic Understanding
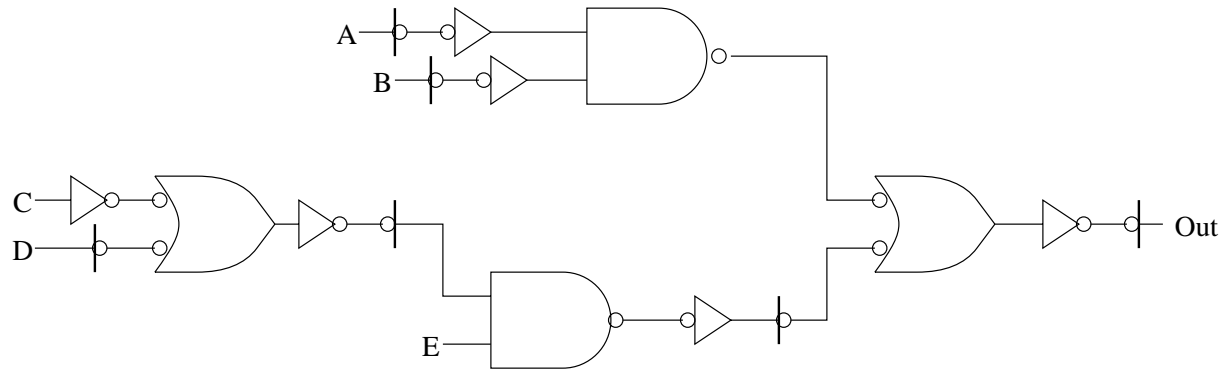
Part A $\qquad\qquad F_{(A,B,C,D,E,F)} = \overline{\overline{(A+B)}(\overline{C}+D)\overline{(\overline{E}+F)}}$

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

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

Part D $\qquad\qquad$ 24 transistors

Part E

Part F $\qquad\qquad$ 28 transistors

Part G $\qquad\qquad F_{(A,B,C,D)} = \overline{\overline{(A+B)}(C+\overline{D})}$

Part H $\qquad\qquad$ 20 transistors

Part I
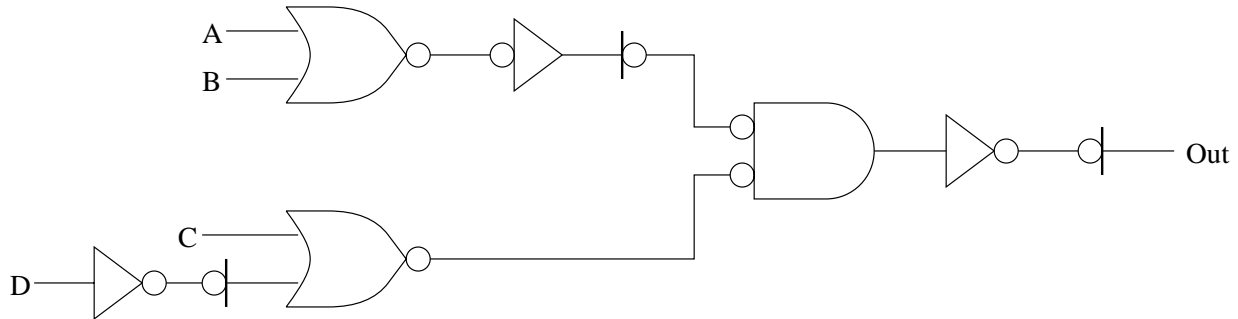
Part J $\qquad\qquad$ 18 transistors

Part K $\qquad\qquad F_{(A,B,C,D,E,F,G)} = \overline{\overline{A}\,\overline{\overline{B}}\,\overline{C}\,\overline{D}\,\overline{(E+\overline{F})}} + G$

Part L $\qquad\qquad$ (1 x 6)+(4 x 4)+(2 x 8) = 38 transistors

Part M