Question: Convert the following Boolean Logic expressions into equivalent Majority Gate Logic by using AND/OR mapping method demonstrated previously making use of the AND and OR forms as indicated above.

Use the method to first perform a direct AND/OR mapping of the expression. Then see if the expression can be further reduced to a simpler logic form and perform an AND OR mapping of the reduced expression.

Example: \( n = \bar{x}_1 \bar{x}_2 + \bar{x}_2 \bar{x}_3 \) can be further reduced to \( n = (x_1 + x_3) \bar{x}_2 \). Similarly, for all the equations below perform the AND/OR mapping for the original expression and the reduced form of the expression.

(a) \( n = (x_1 + x_2)(x_1 \bar{x}_2) \)

(b) \( n = x_1 x_3 + x_2 \bar{x}_3 \)