

This project asks you to use the Quine-McCluskey method to find a minimal expansion of a Boolean expression.

Find a minimal expansion of each of the following sum-of-products Boolean expressions by using the Quine-McCluskey method.

(a) $\bar{x}yz + \bar{x}\bar{y}z$

(b) $xyz + xy\bar{z} + \bar{x}yz + \bar{x}y\bar{z}$

(c) $xy\bar{z} + x\bar{y}z + x\bar{y}\bar{z} + \bar{x}yz + \bar{x}\bar{y}z$

(d) $xyz + x\bar{y}z + x\bar{y}\bar{z} + \bar{x}yz + \bar{x}y\bar{z} + \bar{x}\bar{y}\bar{z}$