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) $\overline{x}\,y\,z + \overline{x}\,\overline{y}\,z$

(b) $x\,y\,z + x\,y\,\overline{z} + \overline{x}\,y\,z + \overline{x}\,y\,\overline{z}$

(c) $x\,y\,\overline{z} + x\,\overline{y}\,z + x\,\overline{y}\,\overline{z} + \overline{x}\,y\,z + \overline{x}\,\overline{y}\,z$

(d) $x\,y\,z + x\,\overline{y}\,z + x\,\overline{y}\,\overline{z} + \overline{x}\,y\,z + \overline{x}\,y\,\overline{z} + \overline{x}\,\overline{y}\,\overline{z}$

(e) $w\,x\,y\,z + \overline{w}\,x\,y\,z + w\,x\,\overline{y}\,z + \overline{w}\,x\,\overline{y}\,z + \overline{w}\,x\,\overline{y}\,\overline{z} + \overline{w}\,\overline{x}\,\overline{y}\,\overline{z} + w\,\overline{x}\,\overline{y}\,\overline{z} + \overline{w}\,\overline{x}\,y\,\overline{z} + \overline{w}\,\overline{x}\,\overline{y}\,z$

SHOW ALL WORK FOR CREDIT

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