

3)

xy zw	0	0	0
	0	0	0
	0		0
	0	0	0

Four ways to group 0's

POS Prime Implicants:

$$(x + y')$$

$$(x' + y)$$

$$(z + w' + y')$$

$$(z + w' + x')$$

$$(z' + w + y')$$

$$(z' + w + x')$$

Pick one

Pick one

$$F = (x + y')(x' + y)(z + w' + y')(z' + w + y')$$

$$F = (x + y')(x' + y)(z + w' + y')(z' + w + x')$$

$$F = (x + y')(x' + y)(z + w' + x')(z' + w + y')$$

~~Positive Implicant~~

One of many ways.