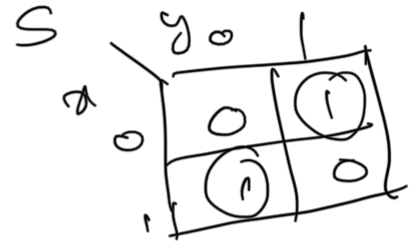


# Half adder

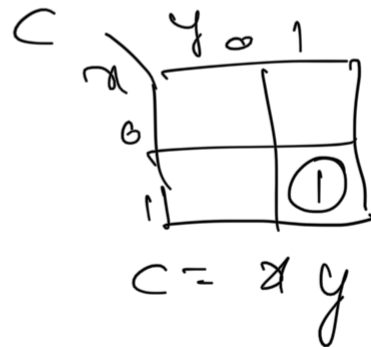
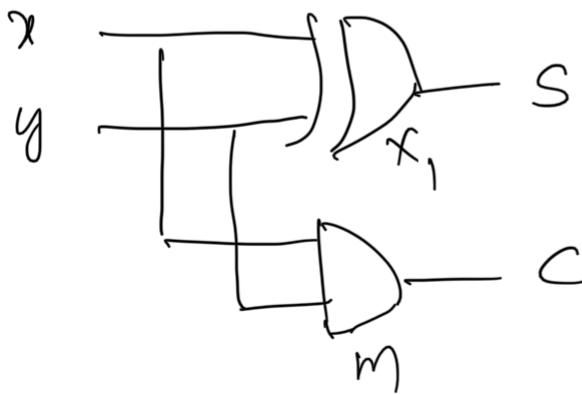
let  $x, y$  are inputs &  $S, C$  are outputs

$x$	$y$	$S$	$C$
0	0	0	0
0	1	1	0
1	0	1	0
1	1	0	1



$$S = \bar{x}y + x\bar{y}$$

$$S = x \oplus y$$



$$C = xy$$

