

$x$	$y$	$z = x \oplus y$	$1-2x$	$1-2y$	$1-2z = (1-2x)(1-2y)$
0	0	0	1	1	1
0	1	1	1	-1	-1
1	0	1	-1	1	-1
1	1	0	-1	-1	1

$$x \in \{0, 1\}$$

$$p(0) \quad p(1)$$

$$E[x] = 0 \cdot p(0) + 1 \cdot p(1) = p(1)$$