

7. 解

k	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
p	0	0	1	1	2	2	2	2	3	3	3	3	3	3	3	3
q	0	1	1	2	1	2	3	4	1	2	3	4	5	6	7	8

Harr(N = 16) = $\frac{1}{4} \times$

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1
$\sqrt{2}$	$\sqrt{2}$	$\sqrt{2}$	$\sqrt{2}$	$\sqrt{2}$	$-\sqrt{2}$	$-\sqrt{2}$	$-\sqrt{2}$	$-\sqrt{2}$	$-\sqrt{2}$	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	$\sqrt{2}$	$\sqrt{2}$	$\sqrt{2}$	$\sqrt{2}$	$-\sqrt{2}$	$-\sqrt{2}$	$-\sqrt{2}$	$-\sqrt{2}$
2	2	-2	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	2	-2	-2	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	2	2	-2	-2	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	-2	-2
$2\sqrt{2}$	$-2\sqrt{2}$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	$2\sqrt{2}$	$-2\sqrt{2}$	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	$2\sqrt{2}$	$-2\sqrt{2}$	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	$2\sqrt{2}$	$-2\sqrt{2}$	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	$2\sqrt{2}$	$-2\sqrt{2}$	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	$2\sqrt{2}$	$-2\sqrt{2}$	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	$2\sqrt{2}$	$-2\sqrt{2}$	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	$2\sqrt{2}$	$-2\sqrt{2}$	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$2\sqrt{2}$	$-2\sqrt{2}$