Solution

31	41 [×] × × ×	51 × × ×
32	42 × × × ×	52 × × × × ×
33 x x x x x	43	53 x x x x
34 × × × ×	44 × × × × ×	54 ^x
35 ^x	45 x x x x x	55 ^x x x x x x
36 x	46 x x	56 × × × ×
37 ^{x x x} x x x	47	57 ^x
38 x x x x	48	58
39 ^x	49	59 × x x x x
40 x x x	50 ^{x x x} x x x	60 x x x x