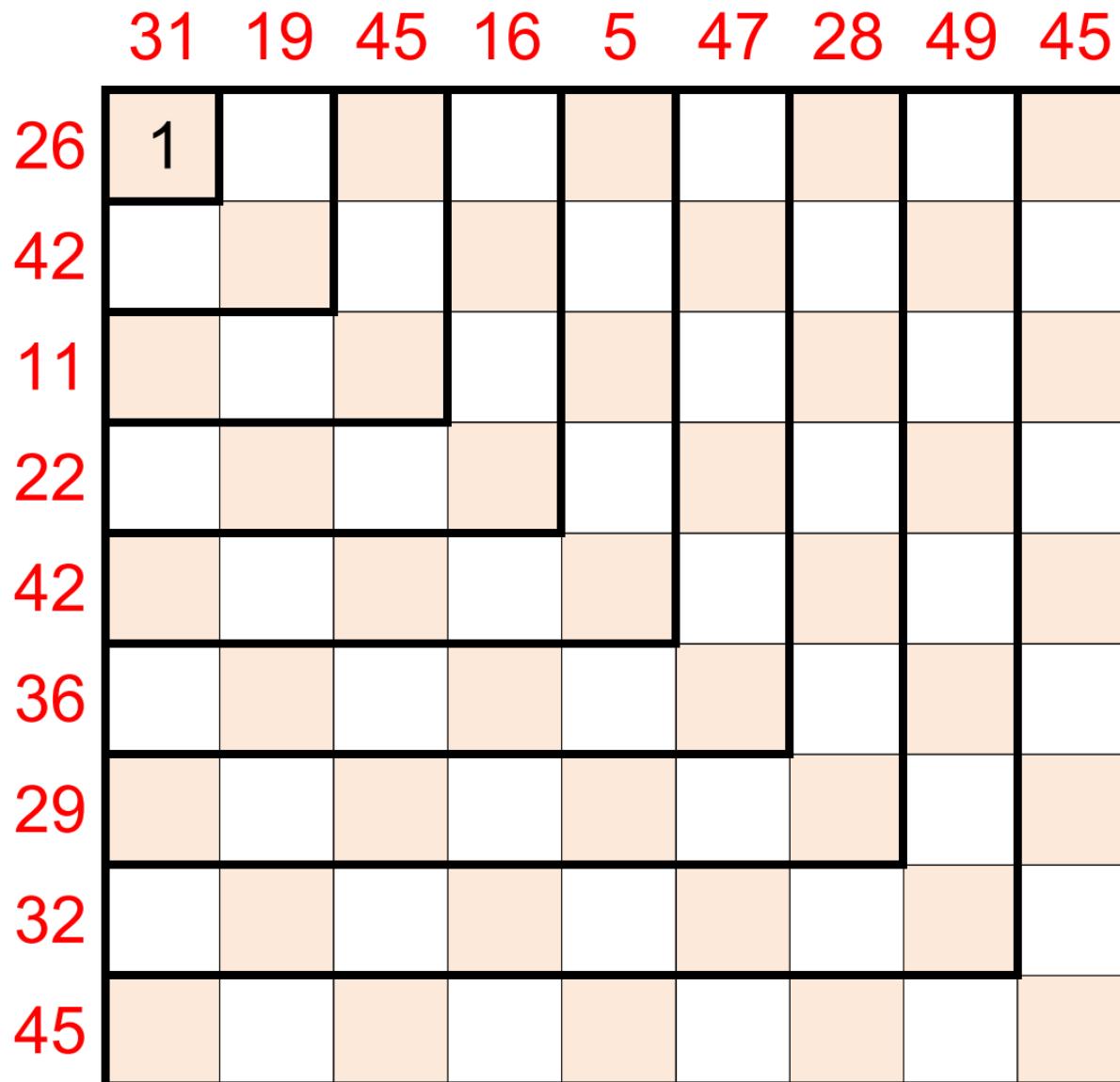In the grid below, enter nine 9's in the outermost hook, eight 8's in the next hook, then seven 7's, six 6's, and son on, down to the one 1 (already entered), so that the row and column sums match the values given along the border.

	31	19	45	16	5	47	28	49	45
26	1								
42									
11									
22									
42									
36									
29									
32									
45									

1		3			6	7		9
2	2	3		5	6	7	8	9
		3					8	
4	4	4	4		6			
5	5	5	5		6	7		9
6					6	7	8	9
		7	7	7			8	
8	8				8		8	
9		9			9		9	9

This is the result I finally arrived at after working. The result is wrong. I have been stuck here for so long.

	31	19	45	16	5	47	28	49	45
26	1		3			6	7		9
42	2	2	3		5	6	7	8	9
11	3							8	
22	4	4	4	4		6			
42	5	5	5	5		6	7		9
36			6			6	7	8	9
29	7		7	7				8	
32		8	8			8		8	
45	9		9			9		9	9

This is the solution released by Jane Street.