Pathway Sudoku

Classic Sudoku rules apply. Additionally there is a path hidden in the Sudoku. It starts and ends at the circled number. The path cannot go diagonally and cannot cross or overlap itself. At some cells the path makes a corner of 90 degrees. The value of a 'corner cell' indicates the distance to the next corner of the path.

A 6x6 Sudoku example:

	6		2		
		2	\bigcirc	4	
			4	2	
		4			3
6	4				
				5	

4	6	1	2	3 >	(5)	
3	5	2	$\overline{\bigcirc}$	4	6	
5	3	6	4	2	1	
2	1	4	5	6	3	
6	4	5	3	1	2	
1	2	; 3	6	5	4	

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