



## Explanation Sum Sudoku (with the Sum as part of the Sudoku).

This Sudoku variant has the same rules as a traditional Sudoku. Each number can be found once in a row, column or block.

Additional on some places, horizontal and vertical, the Sum of a number of positions is given in a connecting position in the puzzle.

In the traditional Sum Sudokus this Sum is an additional value. In this Sudoku the Sum is part of the Sudoku with gives additional solution methods. In the beginning of the puzzle most of the Sums are not jet known and will be found when you are solving the puzzle.

The solution of the puzzle looks like:

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

Horizontal the background color grew is used, explanation of the convention:

|   |   |   |
|---|---|---|
| 2 | 1 | 3 |
|---|---|---|

$2 + 1 = 3$ . At 2 and 1 you will find a grew stroke at the lower part of the position. The Sum (3) is given with a grew background color at the position of the Sum.

Vertical the background color rose is used.

|   |
|---|
| 8 |
| 1 |
| 7 |

$1 + 7 = 8$ . At 1 and 7 there is a stroke at the left part of the position. The Sum (8) is given with a rose background color at the position of the Sum.



# Sudoku Plaza

Horizontal and vertical Sums can cross each other:

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

Explanation:

Horizontal:

$$3+1=4$$

$$2+1=3$$

Vertical:

$$6+1=7$$

$$4+2+1=7$$

$$1+3=4$$

The puzzle looks like:

|   |   |   |   |   |   |   |  |   |
|---|---|---|---|---|---|---|--|---|
|   |   | 8 |   | 4 |   | 2 |  |   |
|   |   |   |   | 8 |   | 5 |  |   |
|   |   |   |   |   |   |   |  |   |
| 2 |   |   |   |   |   |   |  |   |
|   |   |   |   |   |   | 3 |  |   |
| 4 |   |   |   |   |   |   |  |   |
|   |   |   | 6 |   | 3 |   |  |   |
|   | 5 |   |   | 9 |   |   |  |   |
|   |   |   |   |   | 8 |   |  | 5 |