

# 4x4 Magic Square (easy)

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

This 4x4 magic square is the most famous of all the 4x4 magic squares (of which there are 880!). It was originally part of an engraving called “Melancholia” made by Albrecht Dürer. He made the engraving in the year 1514, which are the two middle numbers of the bottom row!

This square has a number of interesting properties: as well as each row, column and diagonals adding up to the “magic constant” 34, the sum of the corners is also 34 (with opposite corners adding up to 17). The opposite squares on each edge (excluding the corners) also sum to 34 ( $3 + 2 + 15 + 14 = 34$  and  $5 + 9 + 8 + 12 = 34$ ). The sum of the numbers in each quadrant make 34 (the top-left quadrant for example is  $16 + 3 + 5 + 10 = 34$ ). And finally, the central four numbers make (guess what...)  $10 + 11 + 6 + 7 = 34$  !