

# Skyscrapers – Worksheet

#### Which are the numbers?

We usually start by having the grid with numbers and filling it with skyscrapers. If we put the skyscrapers first on an empty grid with no numbers, which numbers should be written? How many solutions are there?

## How many 4's can there be at most? And 1's?

Which is the maximal number of 4's and 1's we find on a board? Can you find different ways to place the skyscrapers to get these results?

### Tip:

Think about which are the possible positions of the skyscrapers when you have a number 1 or a number 4 in a row. You can draw the solutions to deduce what is happening.

# How many of each number can there be on a grid?

After thinking about how many ones and fours there might be, which are the smallest and largest numbers that can appear, can you now think about the other numbers? How many of each can there be?

#### Tip:

Try to organize your search, to avoid losing solutions.