



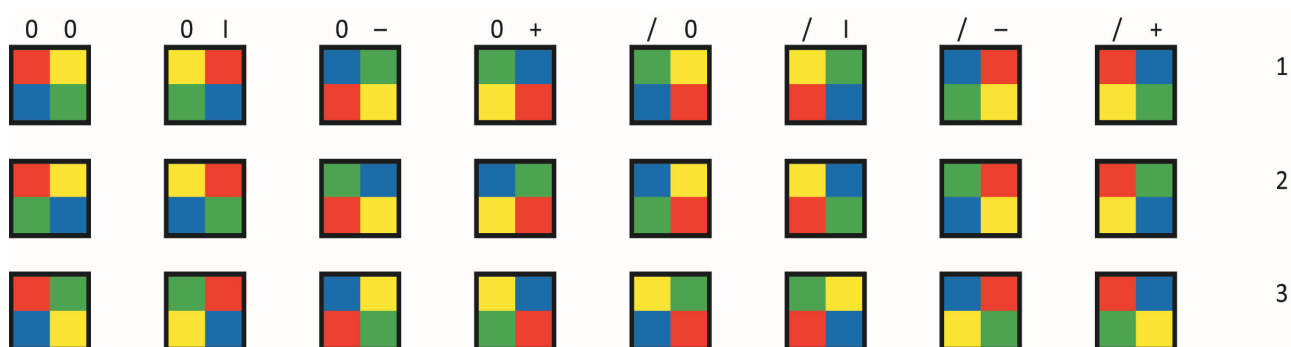
School:  
 Name of Student:  
 Sets: square  
 Further tools: computer, Excel  
 Date:

**STUDENT**  
 PUSE Task Number  
**C**  
**413**

**Description of the task:**

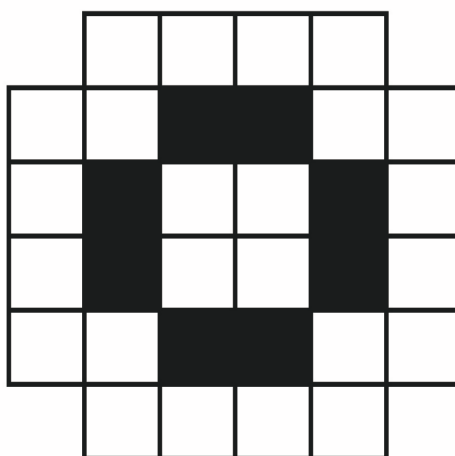
Below you can see the simplified model of Poly-Universe without scaling symmetry, focusing on colours. More precisely, we assume that each square at the vertices is of the same size and the hole is also transformed into a same-sized square, coloured with the base colour of the element. Instead of arranging layouts with the Poly-Universe set, now we work on the computer. Let's open an Excel file.

The sequence of squares below shows all possible colour combinations of red, yellow, green and blue.



1. Fill in the square below in a way that the connecting vertices should always be of the same colour (see the example below). Elements above can be used multiple times, but those in the same rows at most eight times.
2. Fill in the square below in a way that the connecting vertices should always be of different colour. Elements above can be used multiple times, but those in the same rows at most eight times.

When filling in the figure, always copy one of the 24 squares to a suitable space.



**Solution(s) of the task:**

**Remarks / Self-evaluation:**