Tiles with colours:

1. Leave out the three tiles that have four coloured squares. Use the other 9 to make a 3x3 square, where all the touching edges match in colour.
2. Leave out the three tiles with two colours. Use the other 9 to make a 3x3 square, where all the touching edges match in colour.

Tiles with shapes:

3. Leave out any of the ten tiles. Use the other 9 to make a 3x3 square where all the touching edges match shape and colour.
4. Leave out any of the ten tiles. Use the other 9 to make a 3x3 square where all the touching edges match shape but differ in colour.
5. Leave out any of the ten tiles. Use the other 9 to make a 3x3 square where all the touching edges match colour but differ in shape.
6. Leave out any of the ten tiles. Use the other 9 to make a 3x3 square where all the touching edges differ in shape and colour.
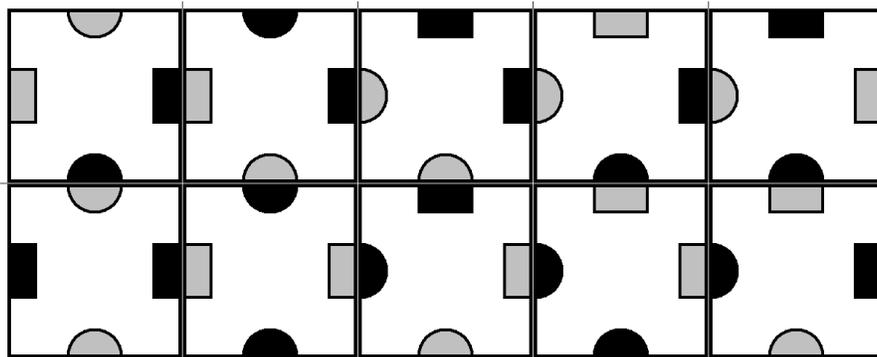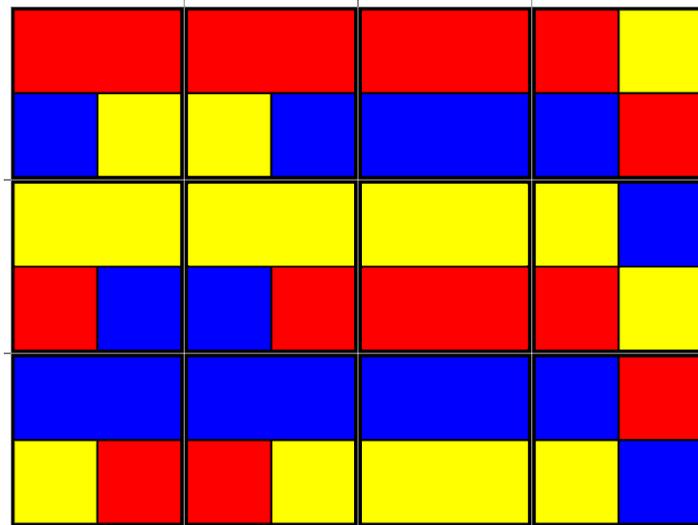
1. The 18 solutions (9 if mirror images are excluded) are shown in the figure below left. Any of the 3x3 sub-squares is a solution.
2. The solution shown below right is unique up to permutation of colours and reflection.

3-6. Regardless of the choice of tile to leave out, there are many solutions – too many to show here.