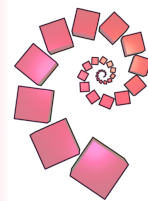


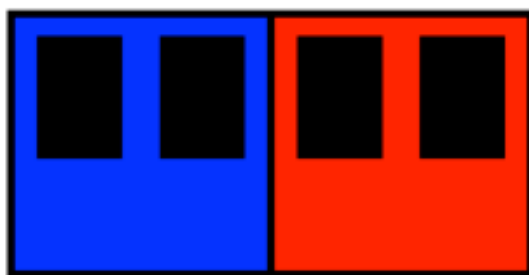
# A City of Towers



In a certain city houses had to be built in a particular way. There had to be 2 rooms on the ground floor and all other rooms had to be built on top of these.

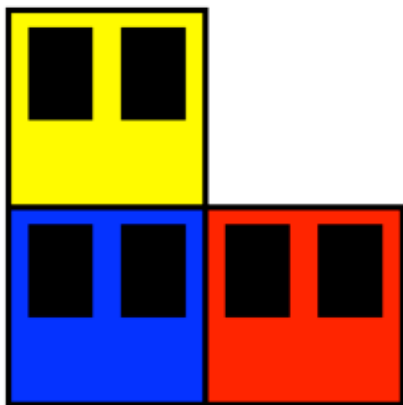
Families were allowed to build just one room for each person living in the house.

So a house for 2 people would look like this:

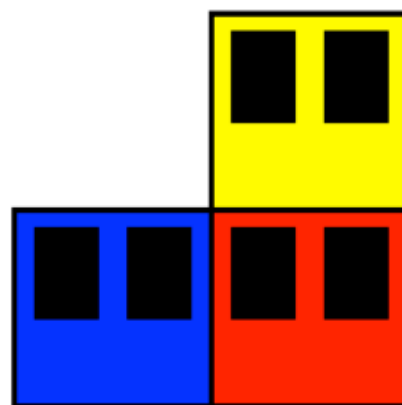


but a house for 3 people could look

like this



or like this.



There are some families of 7 people living in the town. In how many different ways can they build their houses?

[nrich.maths.org/roadshow](http://nrich.maths.org/roadshow)