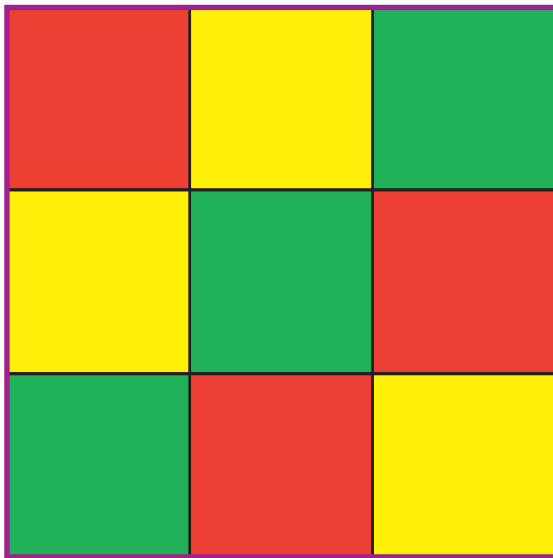




This Latin square design is used to test **three varieties of rhubarb**.

Adapt the experiment so that **each variety** is also tested for three different fertilisers: A, B and C.

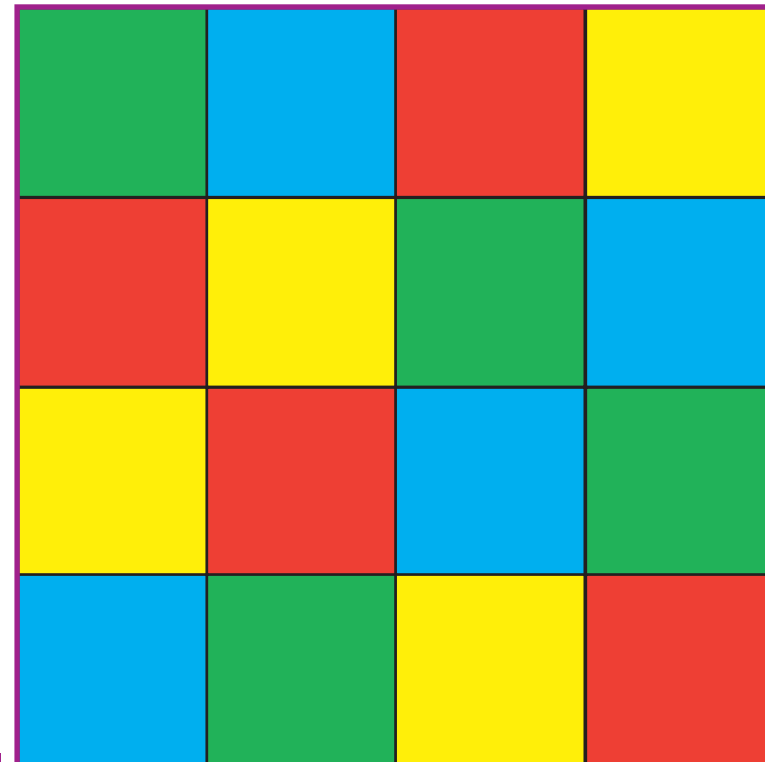


These are called Graeco-Latin squares.

The problem is much more difficult with 4 crop varieties and 4 fertilisers.

There are 4 **really different** possible Latin square designs – and for some of them, there is no Graeco-Latin solution.

For each design: **either** find a **solution** or prove that it is **impossible**.



**Amazing fact:** For order 11, there are 5363937773277371298119673540771840 different Graeco-Latin squares! *Proved in 2005 by McKay and Wanless*