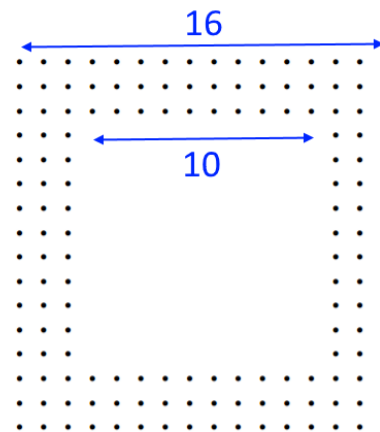
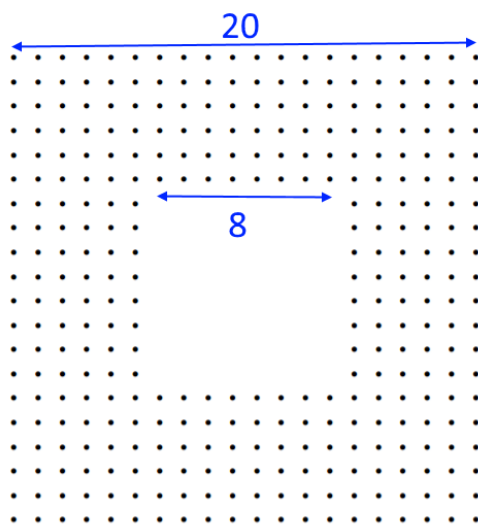


In Napoleonic battles a hollow square was a popular formation for an infantry battalion designed to cope with Cavalry charges.

For example, this picture shows a recreation of Wellington's army at Waterloo.



Below are two diagrams showing symmetrical hollow square formations.



**How could you quickly work out the number of dots in each?**

**A general has 960 soldiers. How many different ways can he arrange his battalion in a symmetric hollow square?**

What can you say about battalion sizes that **can't** be arranged as symmetric hollow squares?

**Can you find a general strategy for arranging any possible battalion into all possible hollow squares?**

What about hollow squares that are not symmetric...?