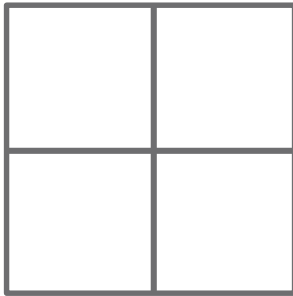


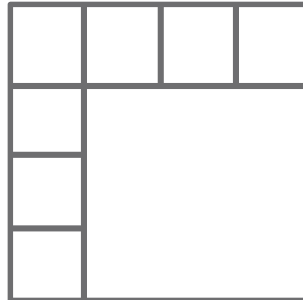
## Problem 7 (spend some time playing with this!)

This question is a bit different and lets you explore more.

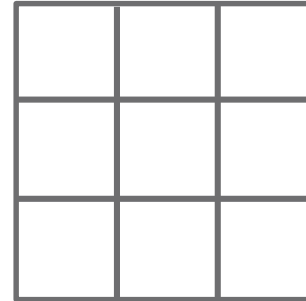
It is possible to divide a square into 4 squares, 8 squares, or 9 squares as pictured below:



4 squares



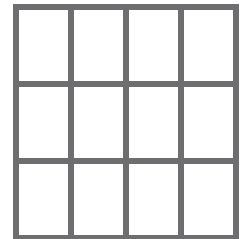
8 squares



9 squares

On the next page is a chart you can fill in to show us other numbers that work. Explore! Play around and show us what you discover! Then use this page to tell us about any patterns you notice or ideas you have for what numbers can and cannot be done.


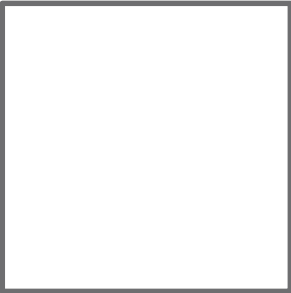
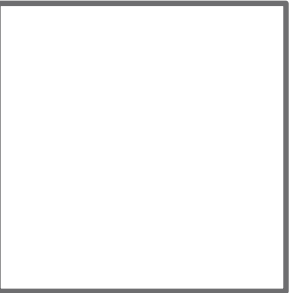
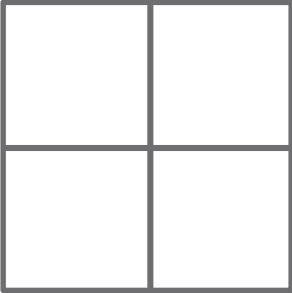
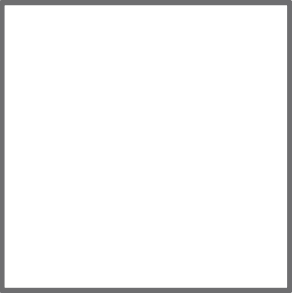
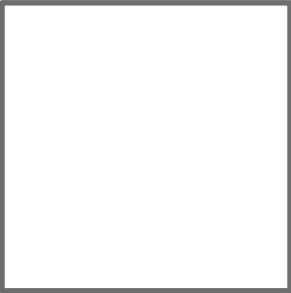
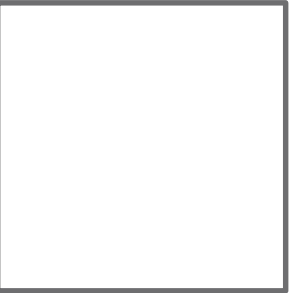
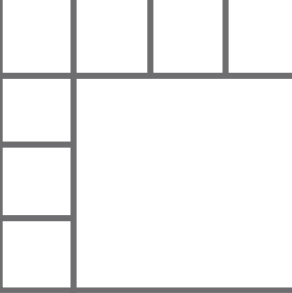
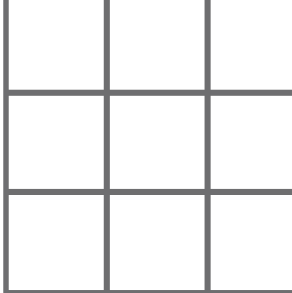






Warning: remember that this is a problem about squares. In a square, all sides are equal. For example, the picture at right is *not* a way to do 12 because it actually divides the big square into rectangles, not squares!



Use this space to tell us any patterns you see, or ideas for what kinds of numbers can and cannot be done.

Fill in what you can on this chart, but beware: some aren't possible! If you think one can't be done, write "not possible".

We've already filled in some of them for you.

1 square: ✓ 	2 squares: 	3 squares: 	4 squares: ✓ 
5 squares: 	6 squares: 	7 squares: 	8 squares: ✓ 
9 squares: ✓ 	10 squares: 	11 squares: 	12 squares: 
13 squares: 	14 squares: 	15 squares: 	16 squares: 