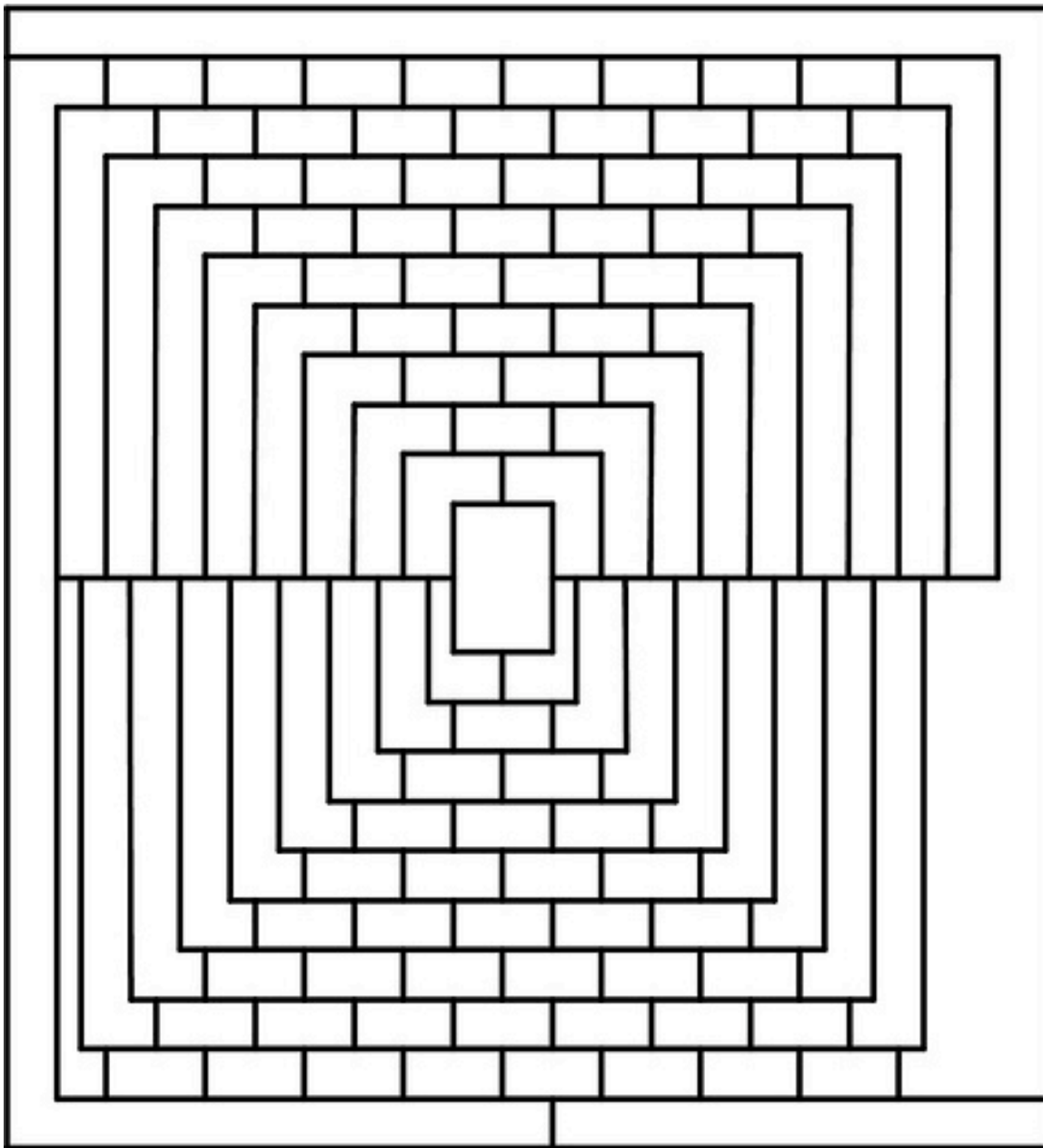


Challenge:

Using the fewest number of colors possible, color in each of the shapes below so that no shape touches another shape that shares its color. For example, if you use only two colors – say red and blue – it is impossible to color the figure below without some red shapes touching other red shapes. It requires more than two colors. What is the fewest number of colors you can use?



Extra challenge: Martin Gardner created this figure. What does this image prove, and how does it prove it?