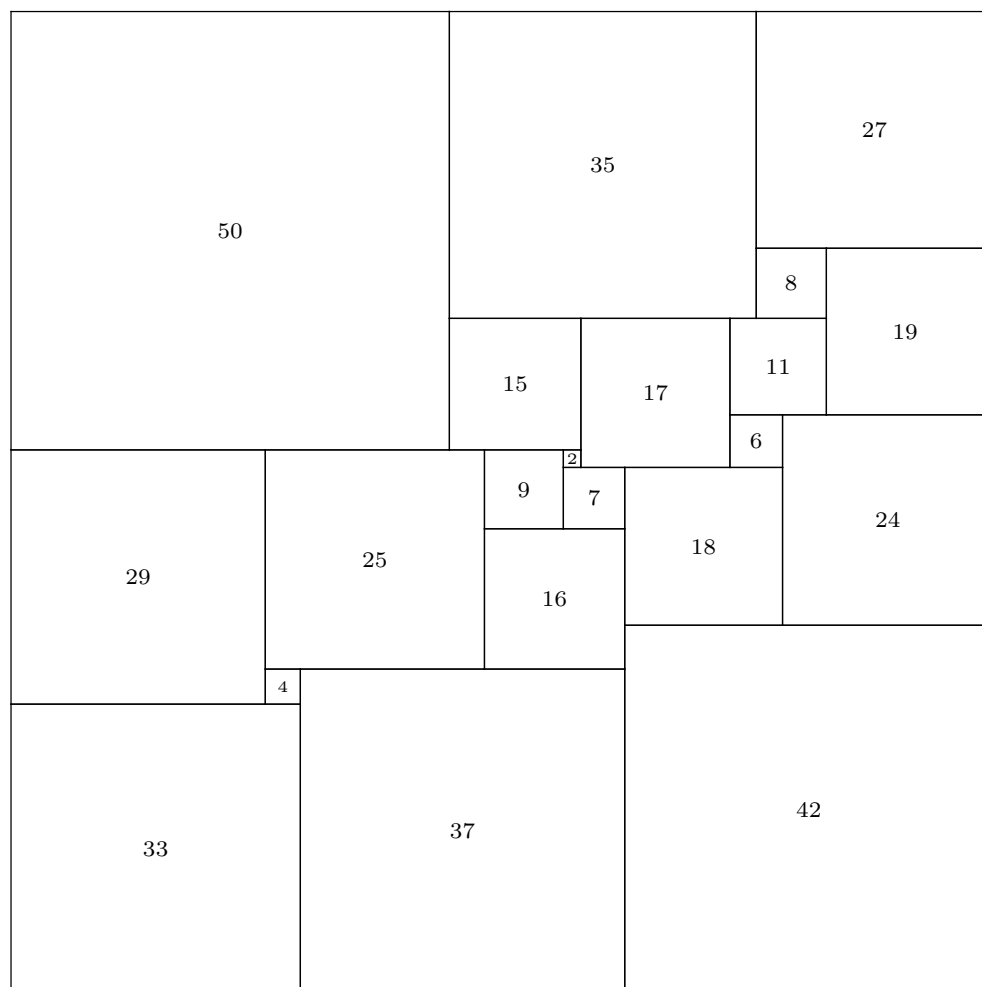


Squaring the square



The question whether a square can be divided into smaller squares of different sizes* was not, as you might expect, solved by the ancient Greeks or some 17th century mathematician. It was solved in the period 1936 to 1938 by four students at Cambridge University. Their first examples used 69 distinct squares to make one big square. Other people tried to do better, and for many years the best dissection of a square used 24 smaller squares. Finally, in 1978, the Dutch mathematician AJW Duijvestin used a computer to find the square pictured above. It uses 21 smaller squares, and he also proved that this is the smallest possible number of pieces.

For more information, see *Squaring the square* in The 2nd Scientific American Book of Mathematical Puzzles and Diversions by Martin Gardner.

* The small squares should all have integer valued widths.