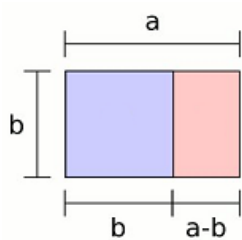


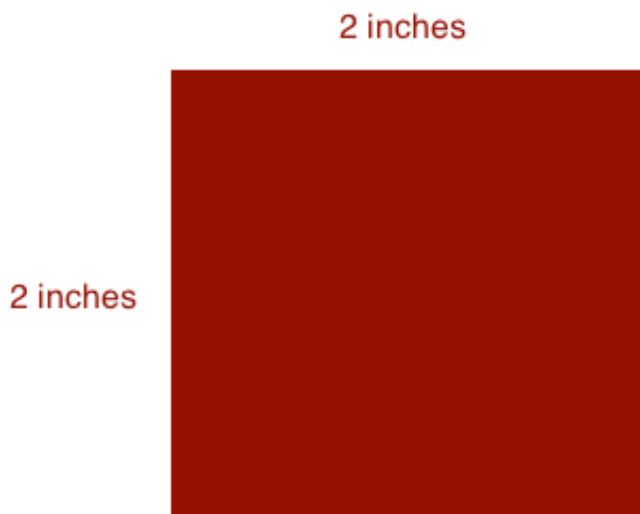
The Golden Rectangle

A rectangle, you may already know, is a four-sided figure in which the opposite sides are equal. The golden rectangle (below) is a very special rectangle because of the length of its sides. Notice that it is made up of a square (blue) and another rectangle (pink). Notice the relationship between the lengths of the sides.

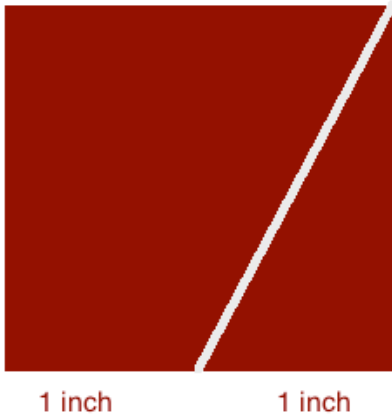


Construct your own “golden rectangle” of the Greek Parthenon.

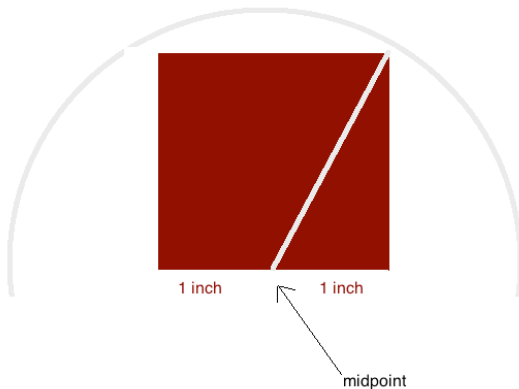
1. Using a marker, pen or pencil make a simple square on a blank piece of paper. (A square has four equal sides.) Make the square 2 inches long by 2 inches high.



2. Draw a line from the midpoint (exact center of) of one side of the square (1 inches from the side) to an opposite corner. This line will be the radius¹ to draw an arc that defines the height of the rectangle.

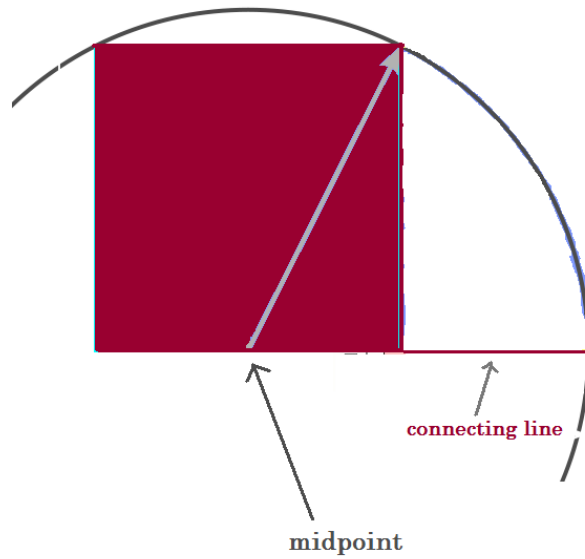


3. Use the length of the line that you have just drawn for your compass width. Put one point of the compass on the midpoint, and the other end of the compass at the end point of the line that you have drawn to the corner of the square. With the compass point at the midpoint draw an arc.

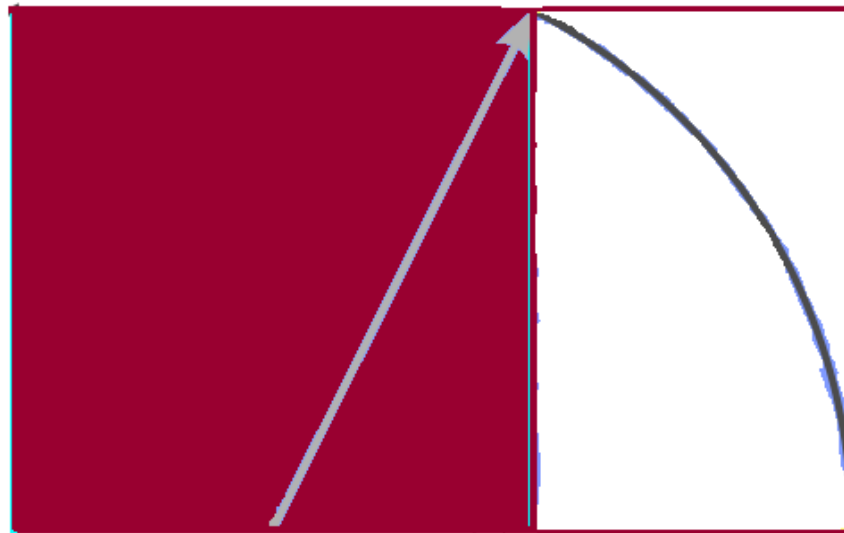


4. With a ruler, connect the square to the circle.

¹ A radius is the line that extends from the center of a circle to its outside part, called the circumference.



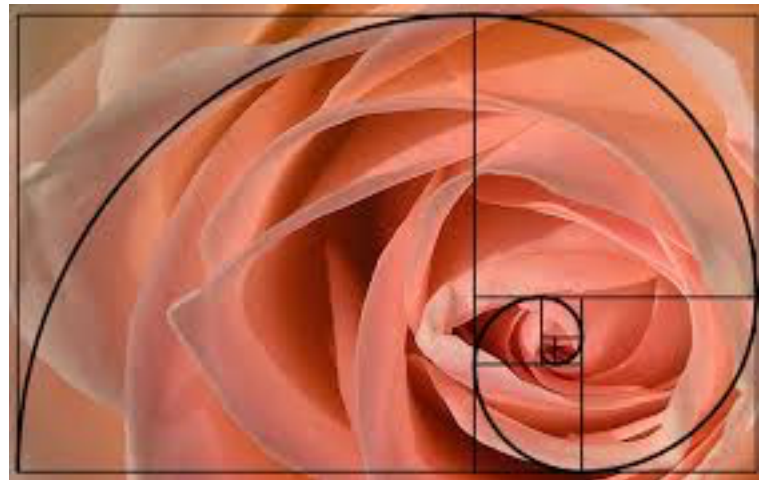
5. Complete the “golden rectangle” by drawing the rest of the lines connecting the square. You now have a golden rectangle.



“Golden rectangles” may be found in the face of the Parthenon (below). They also may be found in the Egyptian pyramids, Da

Vinci's paintings (one below), many book designs, spirals, music, special number sequences, the human body and many natural things, such as the branches of trees and leaves.

The Parthenon, built under supervision of Phidias



The Mona Lisa

