

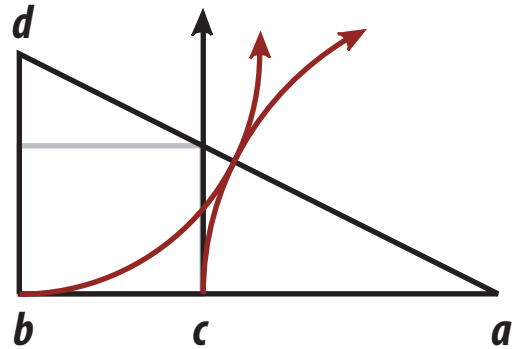
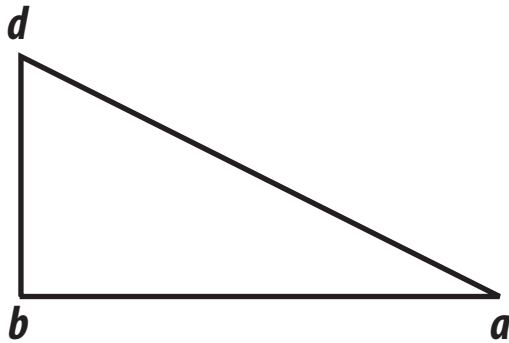
# Pythagoras' discovery



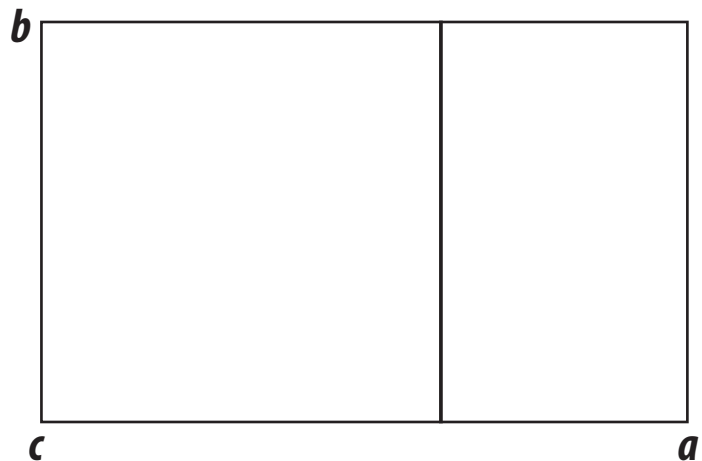
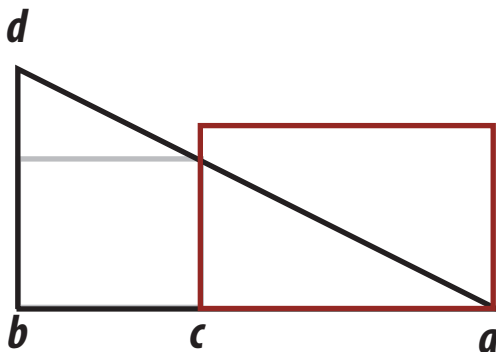
$$\frac{ab}{ac} = \frac{ac}{cb}$$

(Where the relationship of the two segments of the line is equal to the relationship of the longer segment to the whole.)

which he most likely discovered by making a right triangle whose width was twice the length of it's height (below, ab is twice the length of bd)



(ratio of ac to bc = 1:1.618)



a golden section rectangle is produced when bc is used as the height, and ac the width.