

WORDLIST: GOLDEN MEAN

Division in extreme and mean ratio – kraštutinis dalijimas ir vidutinė proporcija; harmoninis santykis

Euclid (about 300BC) in his "Elements" calls dividing a line at the 0.6180399... point **dividing a line in the extreme and mean ratio**. This later gave rise to the name **golden mean**.

Divine proportion – dieviškoji proporcija

The harmony is viewed within nature as the Divine Proportion.

Luca Pacioli (sometimes written as Paccioli), 1445-1517, wrote a book called *De Divina Proportione* (**The Divine Proportion**) in 1509. It contains drawings made by Leonardo da Vinci of the 5 Platonic solids. It was probably Leonardo (da Vinci) who first called it the **sectio aurea** (Latin for **the golden section**).

Divine section - (Latin: *sectio divina*) – dieviškoji atkarpa

Fibonacci Ratio/ Fibonacci Number – Fibonacci skaičių seka

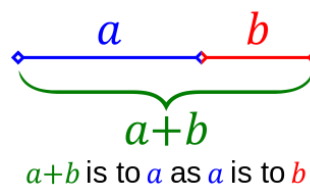
Golden mean – aukso vidurys

Golden ratio – aukso pjūvis

In mathematics and the arts, two quantities are in the **golden ratio** if their ratio is the same as the ratio of their sum to their maximum.

Mathematicians since Euclid have studied the properties of the *golden ratio*, including its appearance in the dimensions of a *regular pentagon* and in a *golden rectangle*, which can be cut into a square and a smaller rectangle with the same aspect ratio.

Line segments in the golden ratio:



Golden section (Latin **sectio aurea**) – aukso atkarpa

Golden number – auksinis skaičius

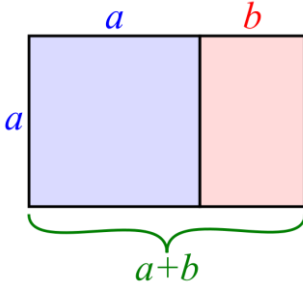
Golden proportion – aukso proporcija

Golden rectangle – auksinis stačiakampis;

A rectangle in which the ratio of the longer side to the shorter is the golden ratio – it is believed that this proportion is aesthetically pleasing.

A **golden rectangle** with longer side a and shorter side b , when placed adjacent to a square with sides of length a , will produce a similar golden rectangle with longer side $a + b$ and shorter side a . This illustrates the

relationship $\frac{a + b}{a} = \frac{a}{b} \equiv \varphi$.



Golden triangle – auksinis trikampis

PHI - Fi (angl. *Phi*), dar vadinama **aukso pjūvis** arba **dieviškoji proporcija** – atkarpos dalyba į dvi dalis taip, kad didesniosios ir mažesniosios dalių santykis būtų lygus visos atkarpos ir didesniosios dalies santykiui. Tai skaičius, kurio reikšmė apytiksliai lygi **1,618**.

The Divine Proportion was closely studied by the Greek sculptor, Phidias, and as a result, it took on the name of Phi.

Golden proportion – auksinė proporcija

Golden cut – aukso pjūvis

Medial section – vidurinė atkarpa

Magic ratio – stebuklingas santykis