The Fascinating FIBONACCI NUMBERS

Fibonacci (1170 - 1240) is considered one of the greatest European mathematicians of the Middle Ages. He was born in Pisa, the Italian city famous for its leaning tower. His father was a customs officer in North Africa, so the Fibonacci increased among North African civilization, making, however, many trips around the Mediterranean coasts.

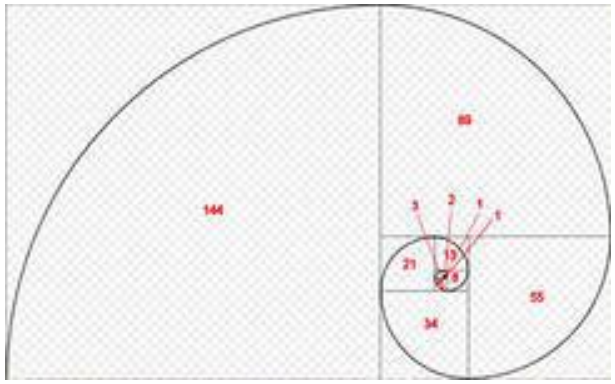
Fibonacci is known as one of the first who introduced arabic numerals to Europe, numbers that we use today: 0, 1, 2, 3, .. 9.

Fibonacci sequence is a sequence of numbers where each number is obtained from the sum of the previous two series. Thus, the first 10 numbers of the Fibonacci sequence are:

1, 1, 2, 3, 5, 8, 13, 21, 34, 55, …

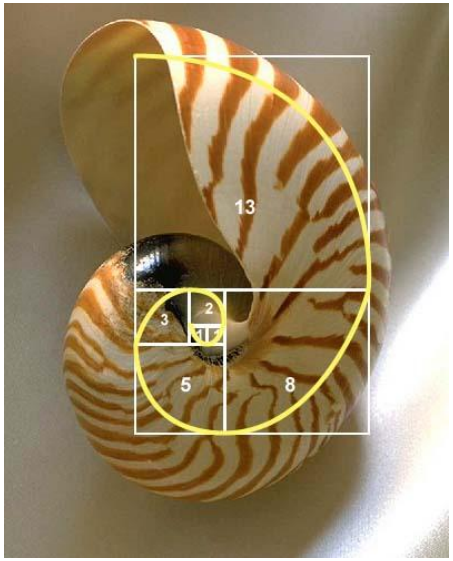
Plants have no way to know the Fibonacci numbers, but they develop in the most effective way. Thus, many plants have leaves arranged in a Fibonacci sequence layout around the stems – the sunflower, f.e..

The reason for this is to achieve an optimum, the maximum efficiency. Thus for example, following the Fibonacci sequence, the leaves of plants can be arranged to occupy a small space and obtain much sun.

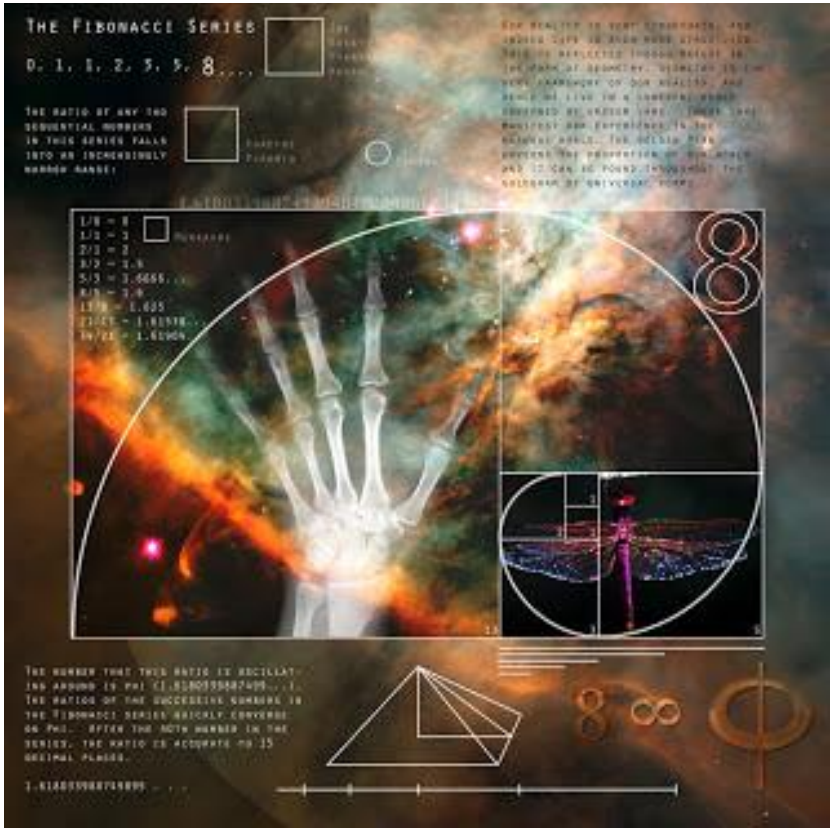


How many of you haven't studied a little the snail shell gone out "to walk" after a summer rain? . Its design follows a highly successful spiral, a spiral that we would find it rather hard to achieve by drawing it with pen. Being studied more thoroughly, it was concluded that this spiral follows the dimensions given by the Fibonacci sequence:

- *the positive axis: 1, 2, 5, 13, and so on ...*



http://www.youtube.com/watch?v=oZQoaI-K3ro



Human hand has five fingers,
each finger with three phalanges, separated by two joints (numbers in sequence). The average size of
phalanges are: 2cm, 3cm, 5cm. In continuation is a bone of the hand which is on average 8 cm.

Human face is characterized, in terms of aesthetic, through some several main dimensions: the main distance between the eyes, distance between mouth and eyes and the distance between the nose and eyes, and mouth size. The science of aesthetics is estimated to be even considered more pleasing to the eye as these dimensions better meet the Fibonacci sequence.