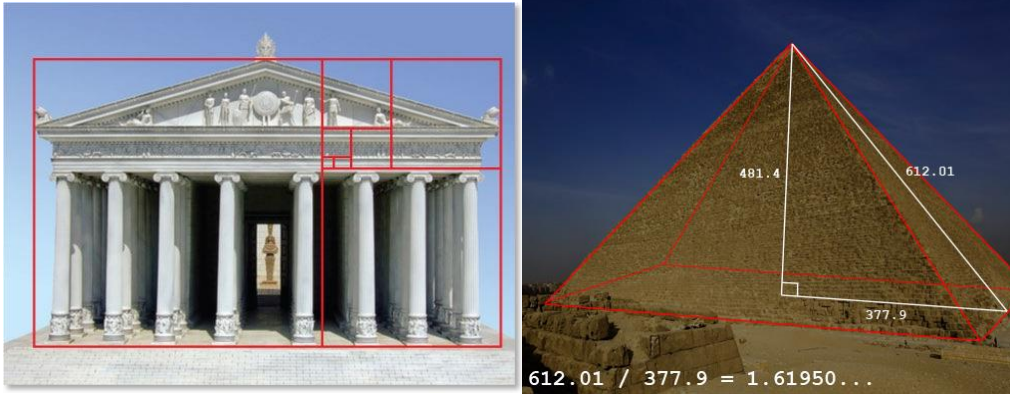


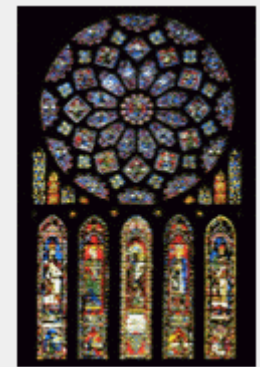
The GOLDEN RATIO in ARCHITECTURE

Architects from the ancient times are said to have used the golden ratio in buildings.



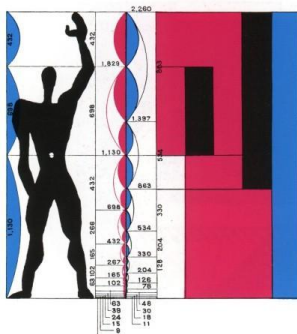
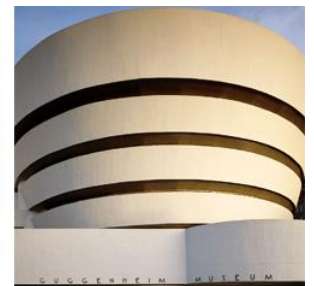
Without document evidence, it is difficult to decide if and to what extent the golden ratio has been used to proportion ancient buildings. Moreover, measurements in situ vary so much that experts still doubt.

However, documents from the Middle Age clearly state the use of the golden ratio in Architecture. Actually, medieval builders of churches and cathedrals approached the design of their buildings using pentagons and pentagrams –two geometric shapes strongly linked with ϕ - as basic tools for their works. Gothic roses are perfect examples of these.



During the Renaissance, Italian scholars and architects such as Luca Pacioli and Leon Battista Alberti promoted the use of the golden ratio also called divine proportion, referring to the human body proportions. In Spain, the front of the University of Salamanca has been designed according to the golden ratio.

Contemporary architecture shows many examples of the use of the golden ratio. The Guggenheim museum in New York was designed by the American architect Frank Lloyd Wright in the XXth century. It is shaped like the golden spiral- a geometric interpretation of the golden number.



Le Corbusier as for him was influenced by the Italian Renaissance architects, reviving the human body proportions linked with the golden ratio. He created the *Modulor*, a new system of measures intended to architecture in opposition to the metric system that he considered did not fit to human scale. Actually proportions in buildings were copied from the ideal human body proportions.

