IN YOUR OPINION IS THERE A RELATIONSHIP BETWEEN MATHS AND ARCHITECTURE???

MATHS IN ARCHITECTURE

In the art and in the architecture maths is crucial.

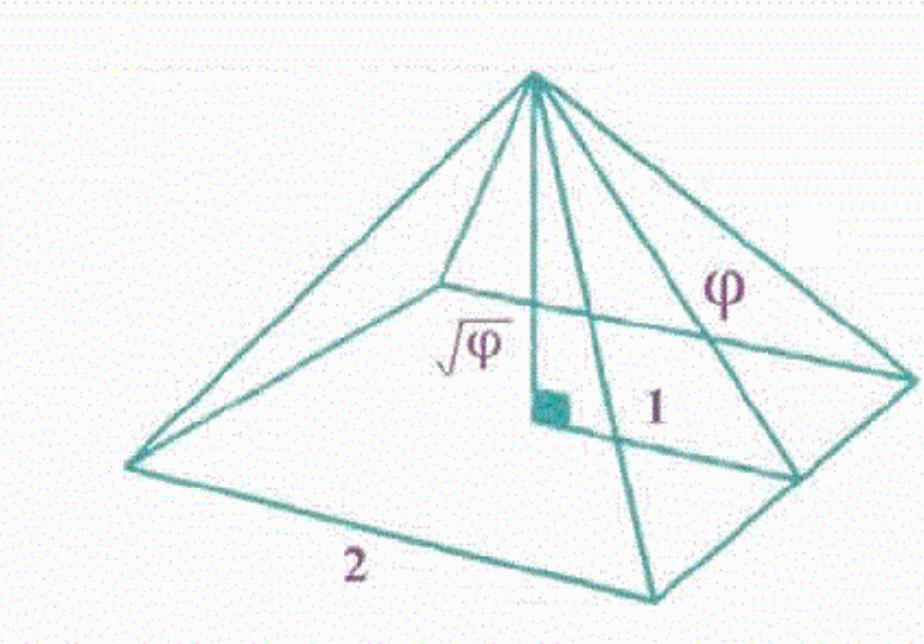


WHICH FORMULA DID THE EGYPTIANS USE THE MOST???

THE ANCIENT PYRAMIDS

One of the first forms of art strongly connected to maths were the ancient pyramids.

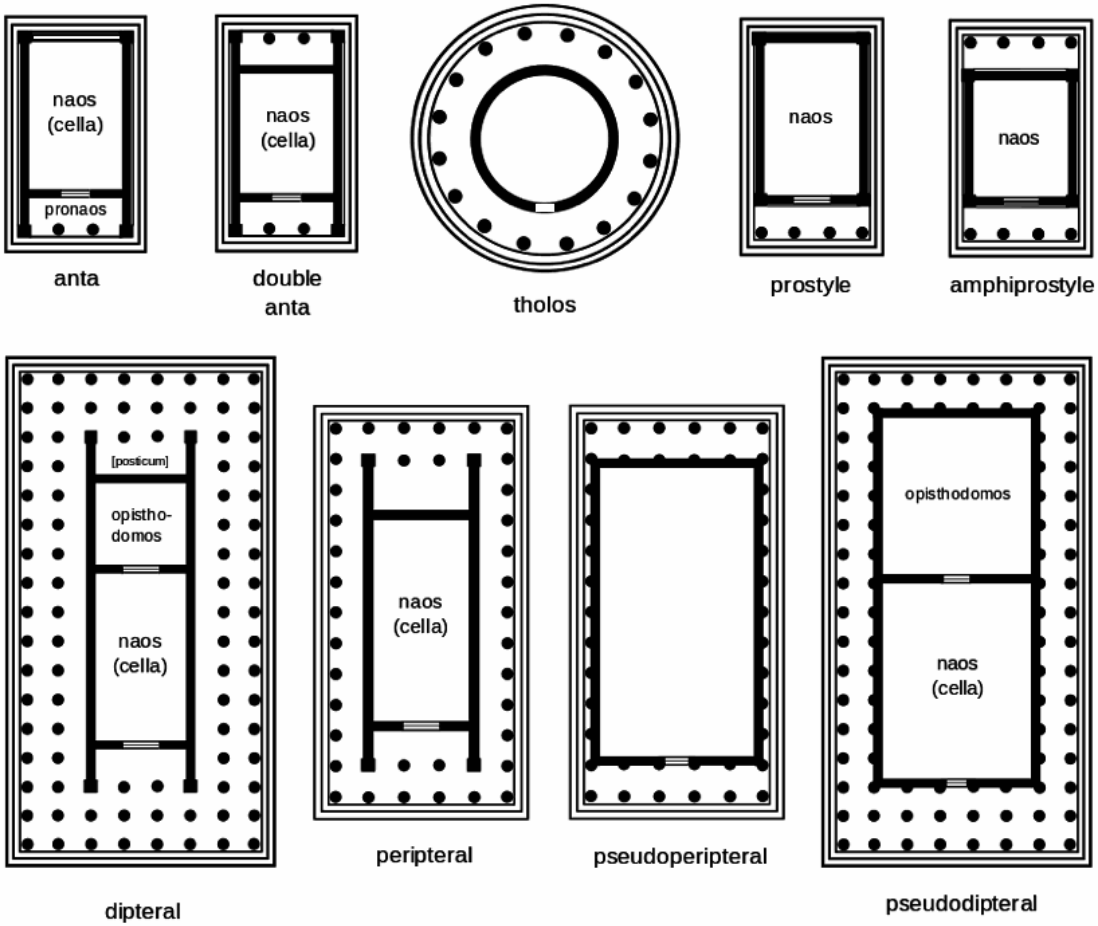
$$\frac{4}{\pi} \approx \sqrt{\varphi}$$





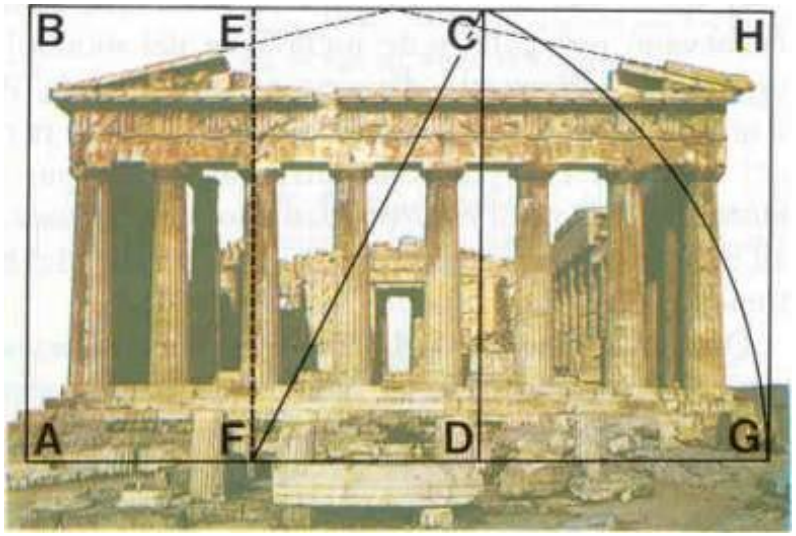
WHERE AND HOW DID THE ANCIENT GREEKS APPLY MATHS TO THEIR BUILDINGS???

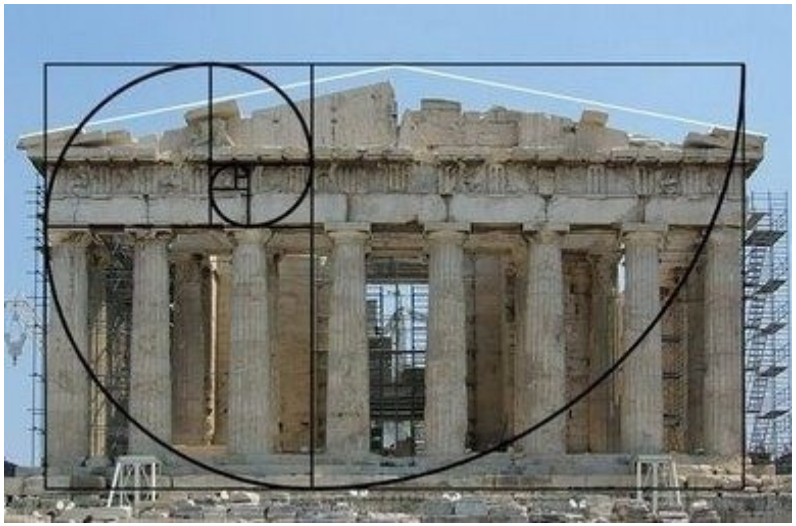
THE GREEK TEMPLE



The canon of the greek temple was based on a mathematical principle: the height of the columns, their distance, the width and the total length of the architecture had to be multiples of the diameter of the column.

THE PARTHENON



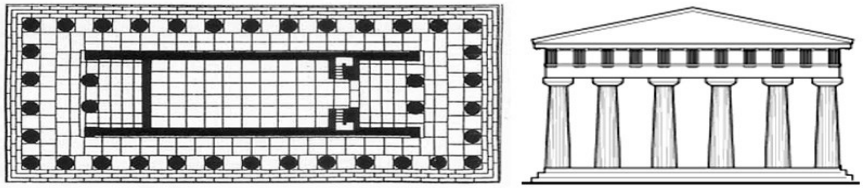


Parthenon's design took into account precise mathematical relationships: the facade is proportioned according to the golden rectangle.

THE VALLEY OF THE TEMPLES OF AGRIGENTO











THE PANTHEON





The Pantheon was the first building to be built with the repetition of a number not multiple of 7 ... the number used was 28, considered a perfect number. In fact the sphere of the Pantheon is internally divided into 28 meridians and there are 28 columns and pilasters.

a number is said to be perfect if it coincides with the sum of its divisors:

28=14+7+4+2+1

DURING THE RENAISSANCE IS THERE GEOMETRY IN THE DISPOTITION OF PLANTS AND FLOWERS IN GARDENS???

THE ITALIAN GARDEN





The Italian garden is characterized by a geometric subdivision of hedges and plant sculptures and fountains.

NOWADAYS HOW DO THE MODERN ARCHITETS JOIN NATURE WITH THE URBAN ENVIROMENT ???

THE VERTICAL FOREST

The vegetation has beneficial effects on the two towers and on the urban environment: it reduces noise pollution, purifies the air by removing CO2 from the atmosphere and emitting O2, etc.

