

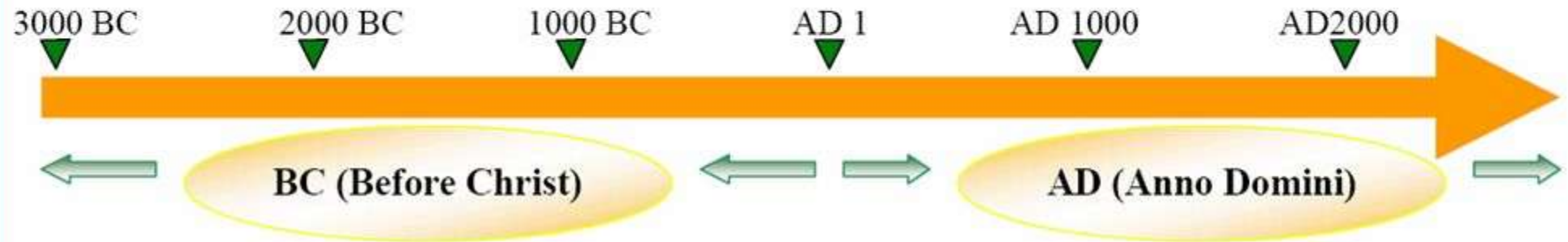
GREEK ARCHITECTURE



GREGORIAN CALENDER

Remarks: For the AD years, sometimes we can omit 'AD' to make things simple.

For BC years, however, we must not do that.





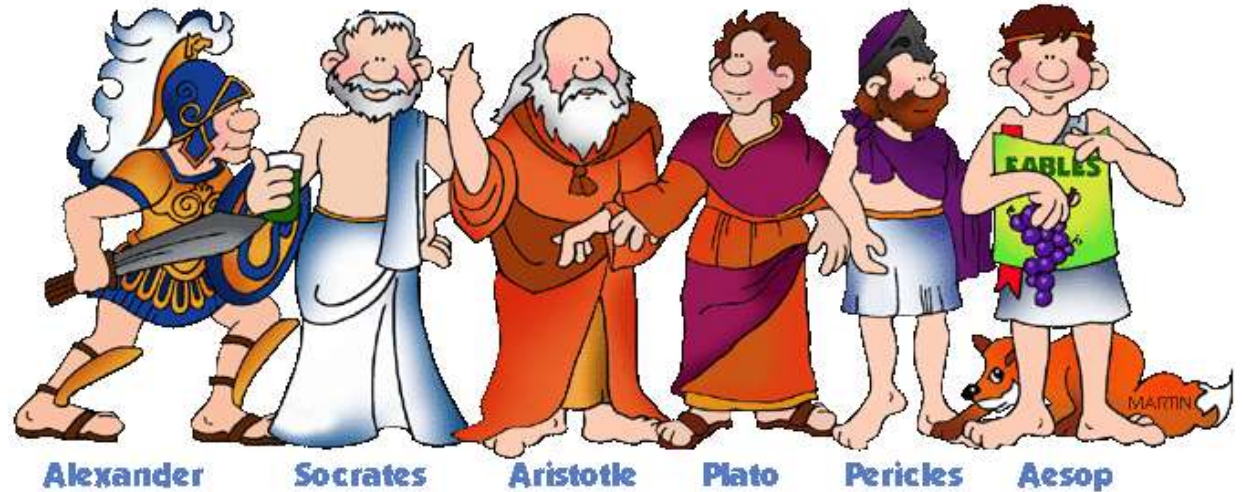
Greece — €





IMPORTANCE

Famous People in ANCIENT GREECE



- ANCIENT GREECE was a powerful civilization that ruled much of the Mediterranean region.
- They impacted so many aspects to our modern world: sports, mathematics, art, philosophy, government, science etc.



HISTORY

Historians divide ancient Greek civilization into two eras

Hellenic period

(from around 900 BC to the death of Alexander the Great in 323 BC)

- **During the earlier Hellenic period, substantial works of architecture began to appear around 600 BC.**

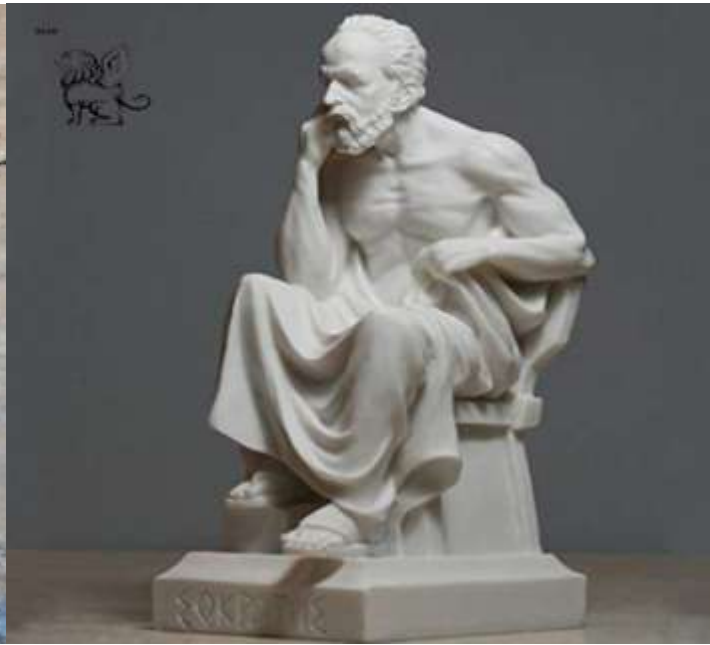
Hellenistic period

(323 BC to 30 AD)

- **During the later (Hellenistic) period, Greek culture spread as a result of Alexander's conquest of other lands, and later as a result of the rise of the Roman Empire, which adopted much of Greek culture.**

GREEK ARCHITECTURE

- The Aegean culture was started on CRETE island in Mediterranean sea about 3000BC by migration of people from Asia minor
- Greece has plenty of building materials like **unrivalled marble** near Athens
- The Greek temples were usually oriented towards east, so that the statues of the deities were lit by the glory of morning sun



Ancient Greek Architecture

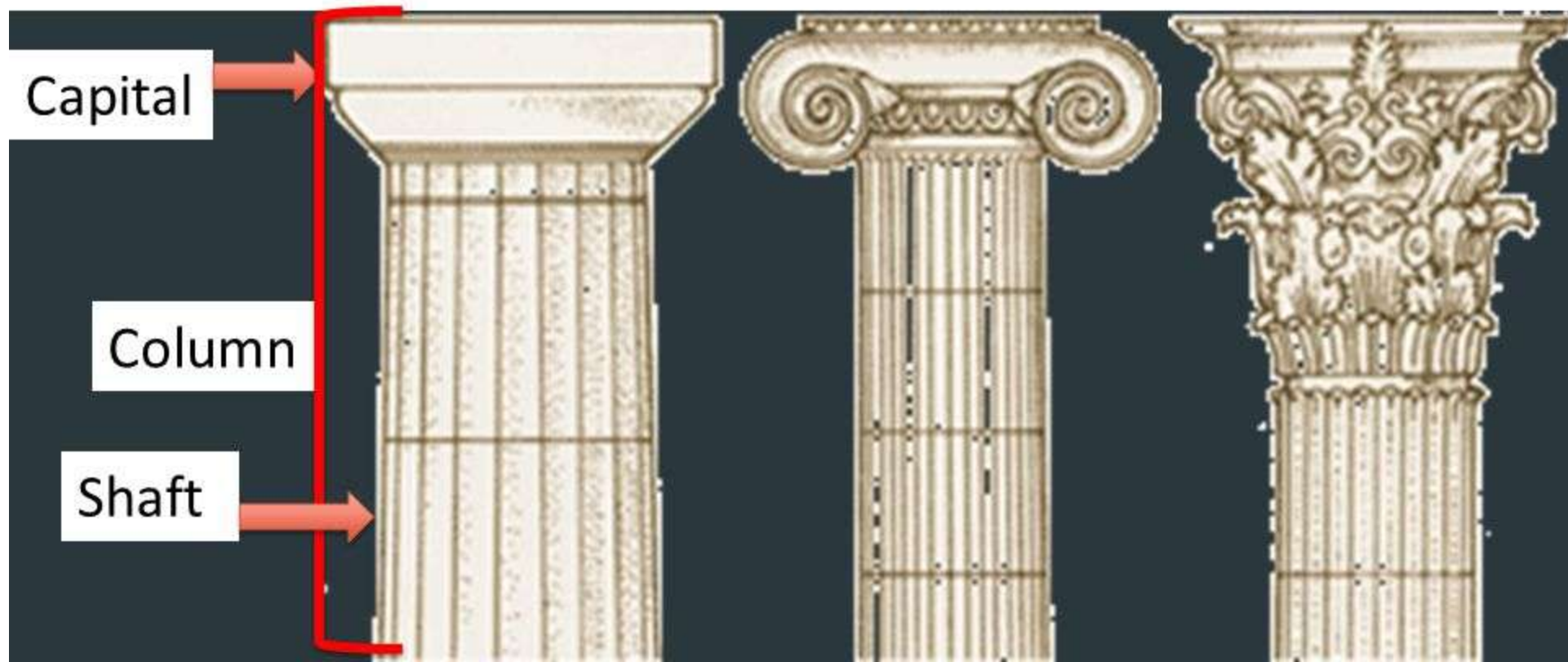
The **Greeks developed three architectural systems, called orders**, each with their own distinctive proportions and detailing.

The Greek orders are:

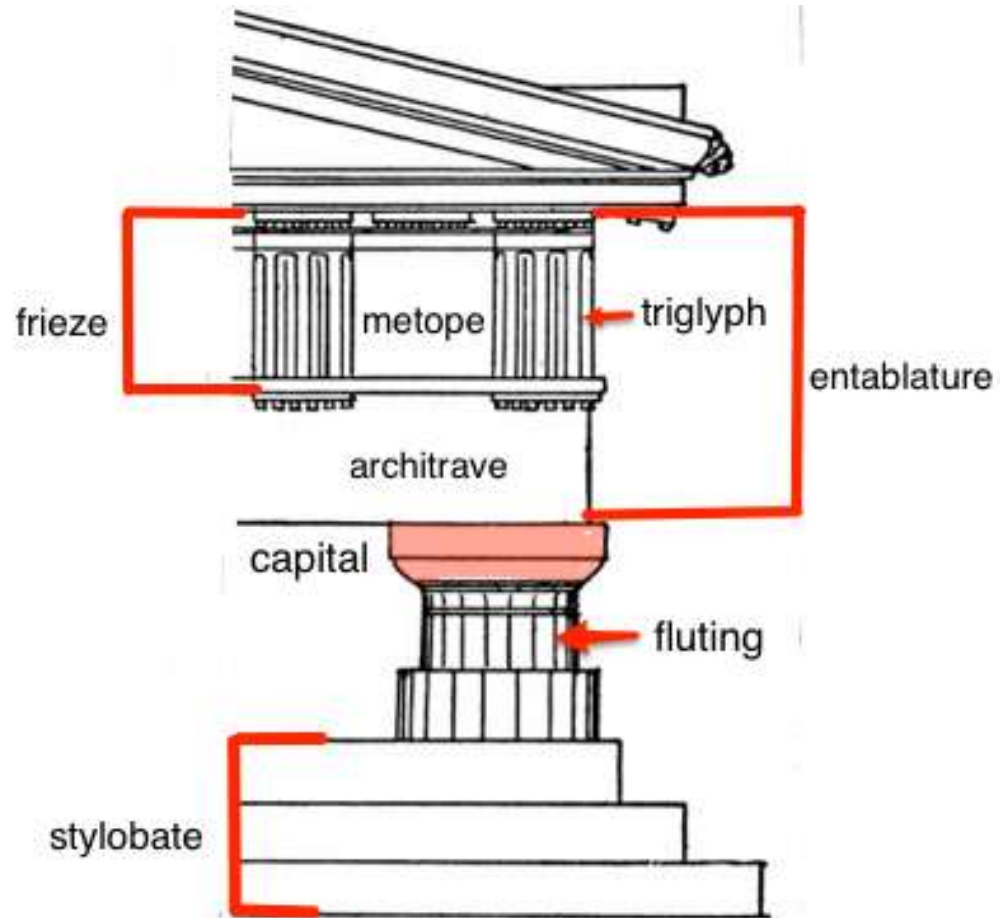
Doric

Ionic

Corinthian



GREEK DORIC ORDER

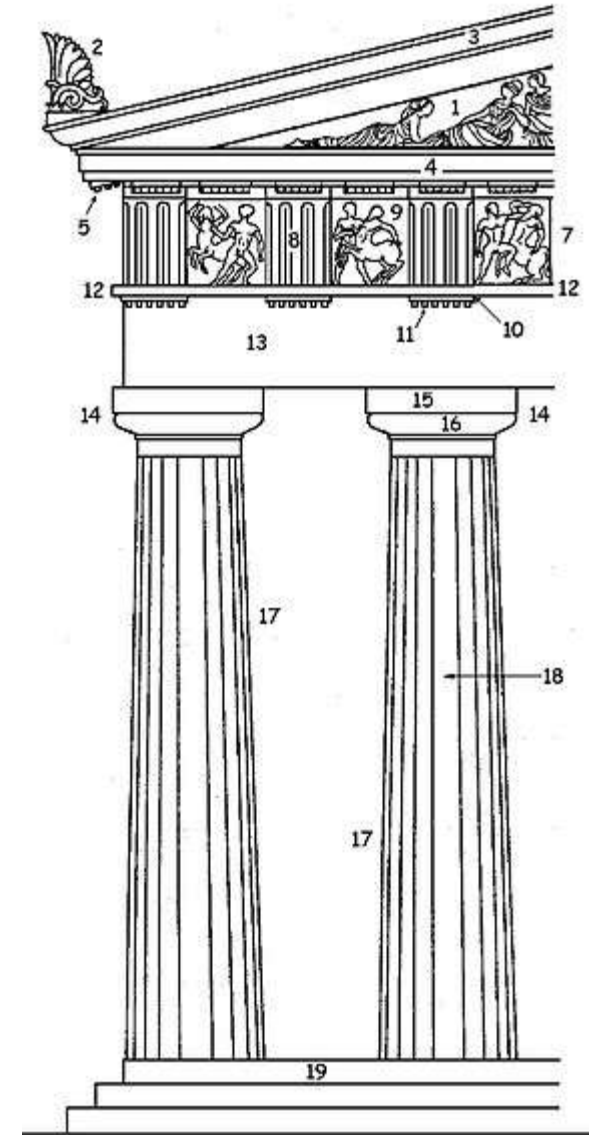


THE PATHENON, ATHENS

Doric comes from Dorians, the ancient people of Greece

The column

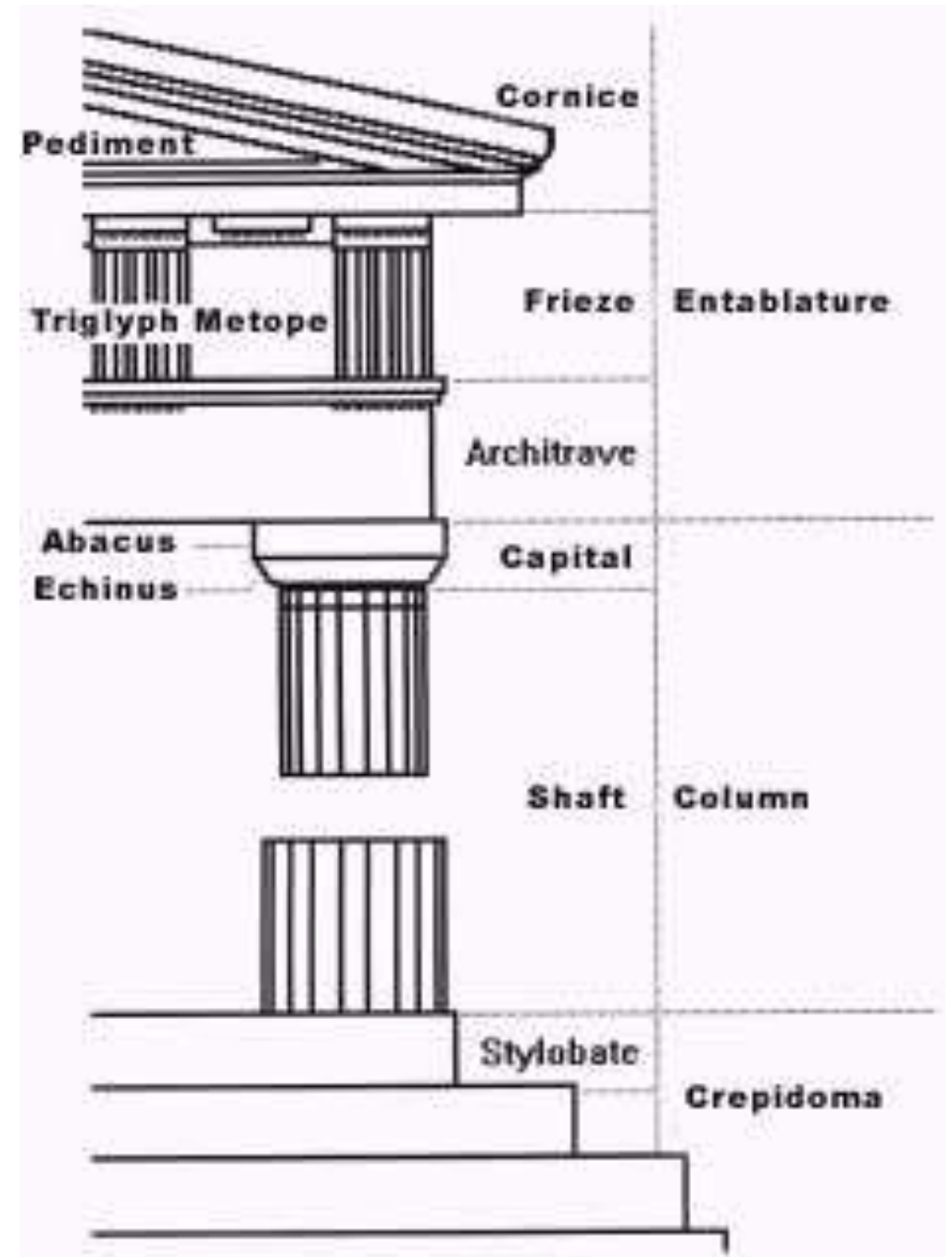
- height is 6 to 7 times of its lower diameter
- It has no base, stands directly on platform of three steps called CREPIDOMA
- The shaft is circular and gradually tapers to $\frac{3}{4}$ to $\frac{2}{3}$ at top
- The shaft divides into 20 flutes(grooves), separated by sharp projections or Arises
- Centre span of column at lower diameter (D) is 2D
- The capital which is semi-diameter high consists of Abacus or Enhinus

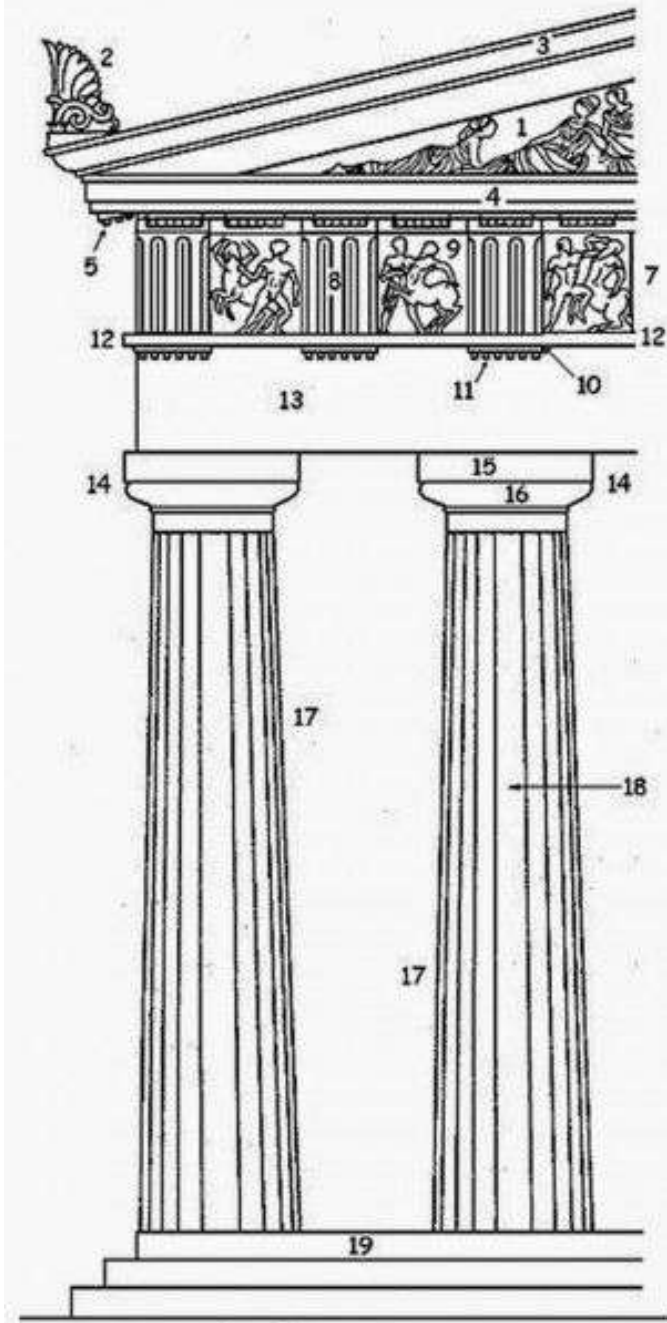


ENTABLATURE

It is two diameter high, consists of three parts,

1. Architrave
2. Frieze
3. Cornice





Parts of an Ancient Greek temple of the Doric Order:

1. Tympanum,
2. Acroterium,
3. Sima
4. Cornice
5. Mutules
7. Frieze
8. Triglyph
9. Metope
10. Regula
11. Gutta
12. Taenia
13. Architrave
14. Capital
15. Abacus
16. Echinus
17. Column
18. Fluting
19. Stylobate

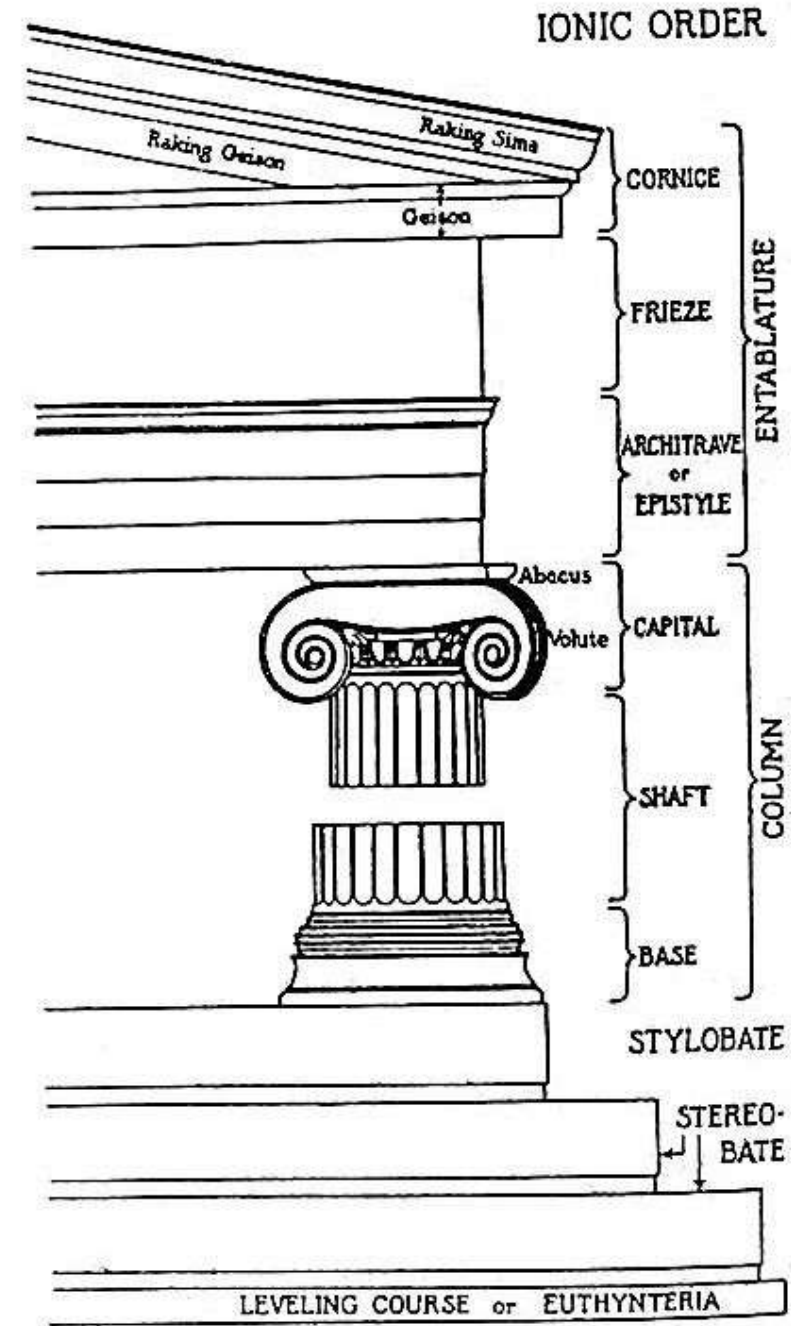
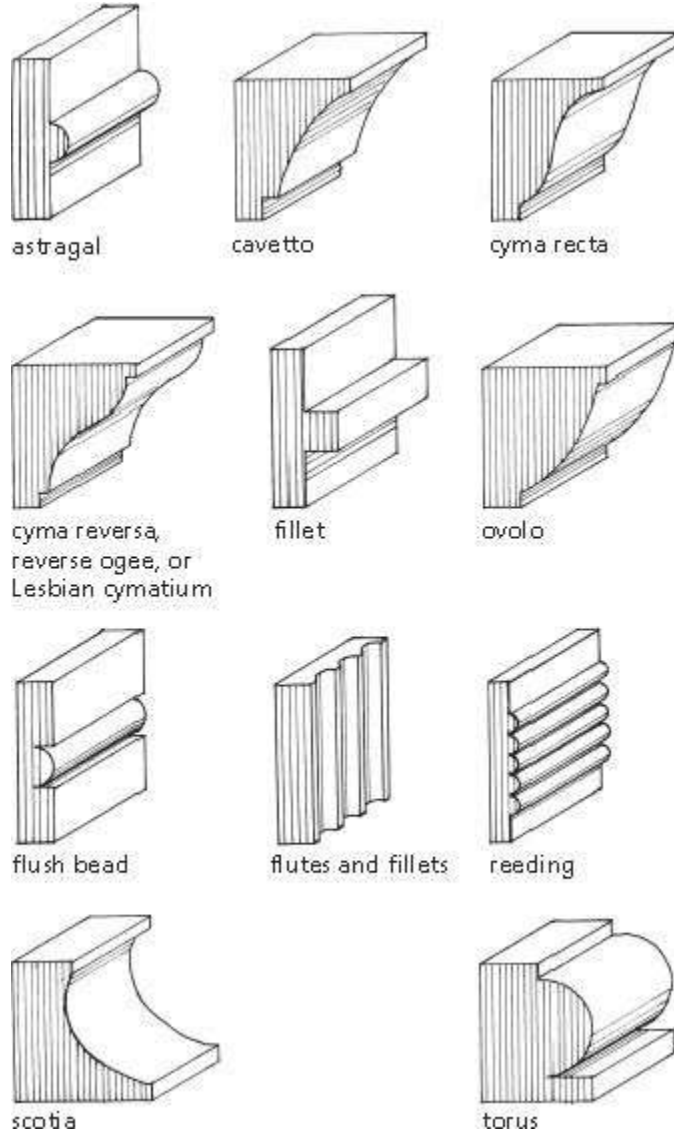
GREEK IONIC ORDER

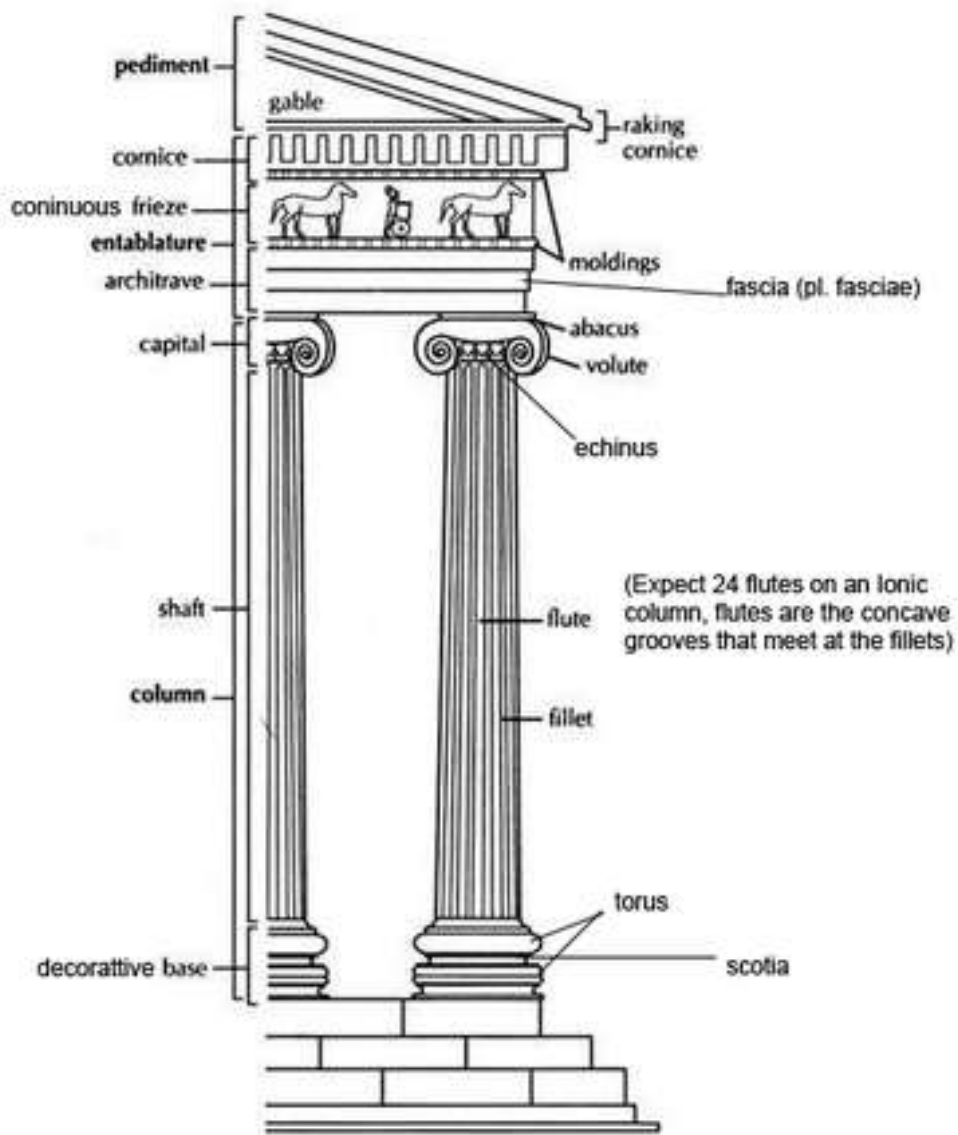
- It is named after the Ionians of ancient Greece
- This order takes place in Temple of Erechtheion built in the year 409BC



The column

- This column has a base
- This column height = 9 times the lower Dia
- The moulded base consists of upper and lower torus separated by scotia and fillets
- The circular column has 24 flutes separated by fillets
- The center span distance is 4D





Column height: if "n" is the diameter of the columns itself, then the column will be 8 to 10n in height. This means the column will be relatively slender, compared with those of Doric proportions.

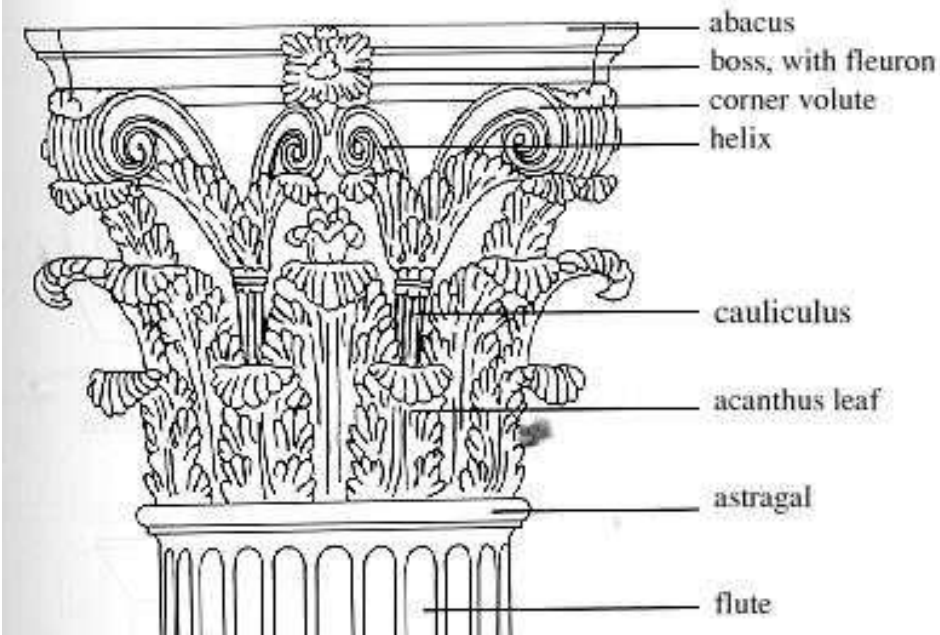
GREEK CORINTHIAN ORDER

This type of order placed in Choragic Monument of Lysicrates

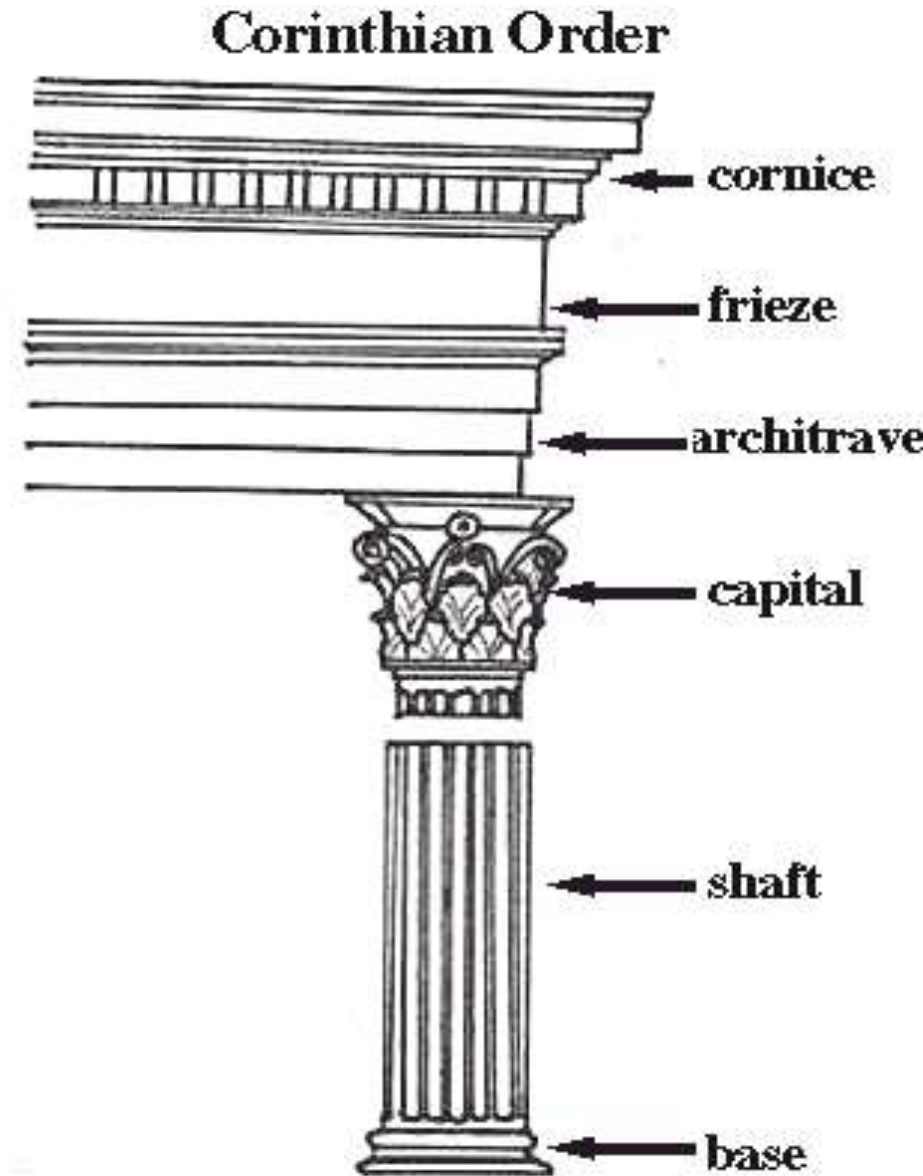


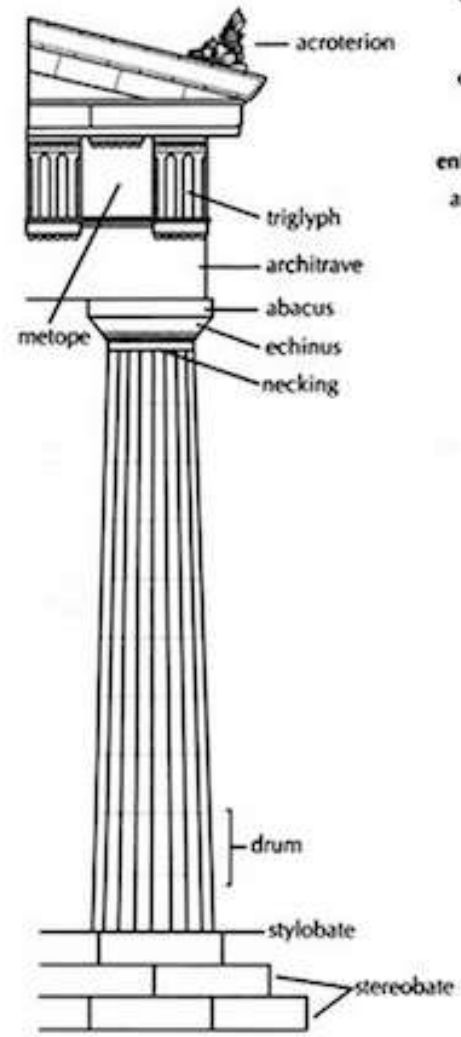
COLUMN

- Column height = 10 times of Diameter
- The lower torus separated by scotia and fillets
- The Centre span of columns is 3D
- The lower torus is equal to the shaft, it has 24 flutes separated by fillets
- The lower part of capital has two rows of eight acanthus leaves resting on lotus
- And the upper part rise eight caulicles in between the leaves and upper rows

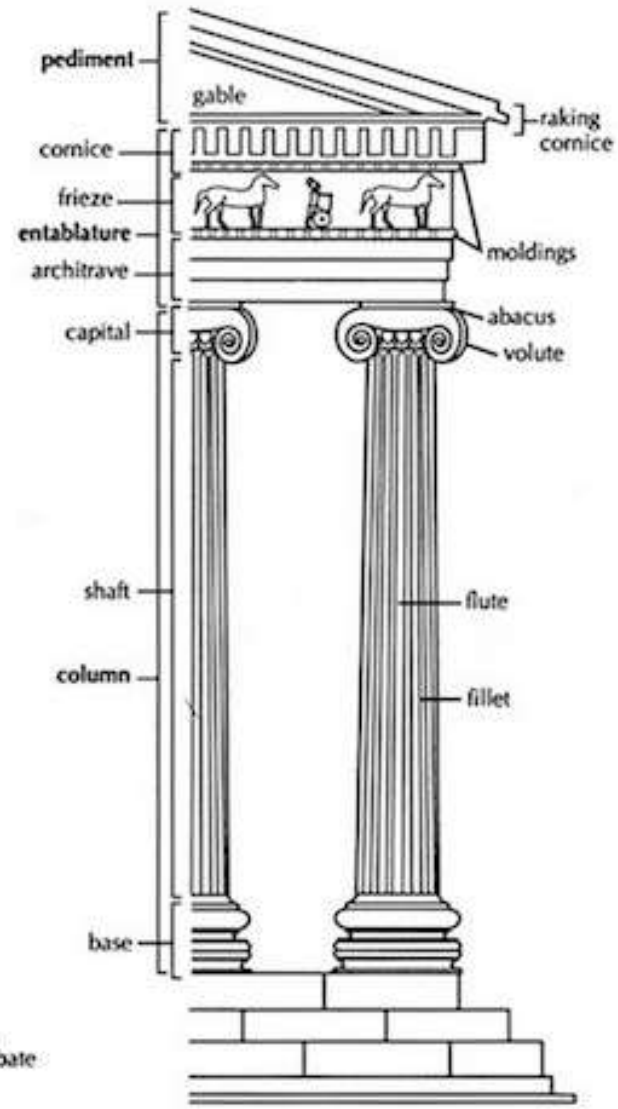


- The Architrave is divided in three fasciae, height = $\frac{3}{4}$ of diameter
- The frieze also has same height ornamented by a continuous band of sculptures
- The cornice of same height, is lighter than other types
- At the top antifixial ornament is provided
- This order was chiefly used as a decorative feature and was little used by the Greeks
- This order is lighter and delicate than other two orders

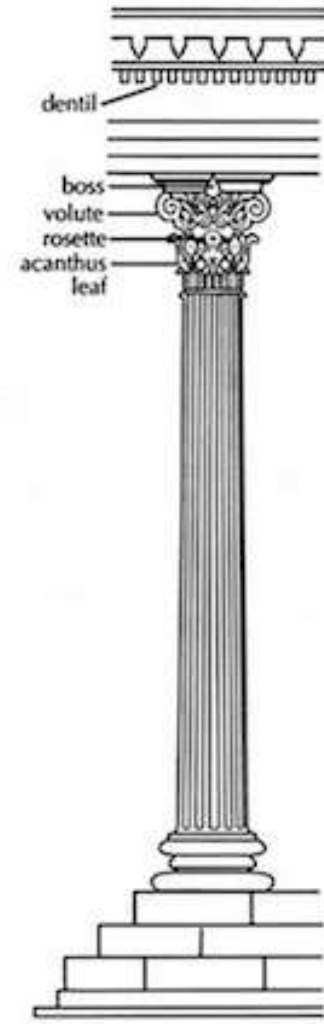




Doric order



Ionic order

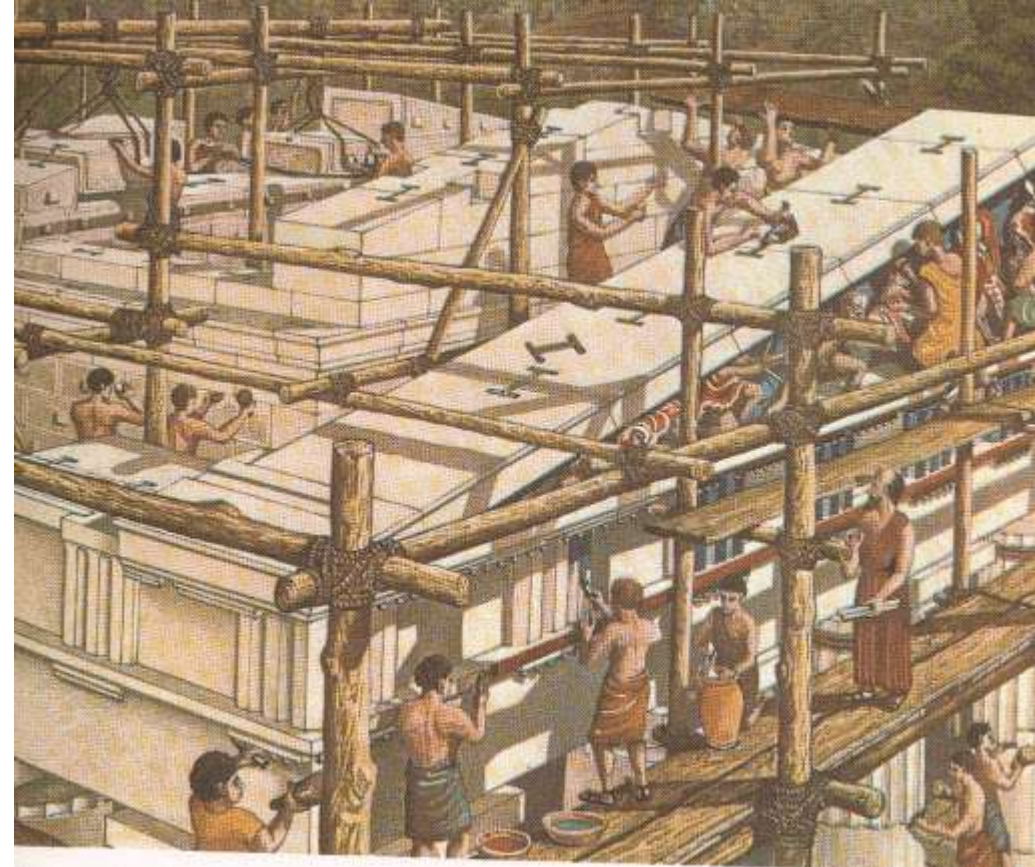


Corinthian order

THE PANTHENON AT ATHENS (447 – 432BC)



- This temple is built entirely in pentelic marble on the high ground of Acropolis
- Dedicated to Athena Parthenos (the virgin god of Greece)
- It is constructed by architect Ictinus and Callicrates under supervision of Pheidias
- It stands on Crepidoma, platform of three steps tread = 70cm, rise=50cm and curve up in the middle of all four sides
- This temple is designed in Octa-Style, (Eight columns in front & back)
- There are 17 columns on either side



- This temple constructed facing east so that the first rays of rising sun should fall and illuminate the statue of Athena
- The statue of Athena in gold and ivory with eyes of precious stones was the finest sculptural achievement of master artist Pheidias
- This statue is 13m long with pedestal
- This temple at its glory stood as a miracle of architecture with its shining marble sensuous sculpture in glowing colors



OLYMPIA: the stadium of Athens

- All the Greek's games were celebrated at Stadiums
- The stadium had a length of 183m with hemi spherical ends,
- Rows of seats were raised on either side for spectators
- The Olympic games were conducted for five days,
- First day was devoted to ceremony and taking Olympic oaths
- Second day, a flame was lit on a sacrificial altar and various sport events were conducted (chariot race, horse race, running, long-jumping, javelin throwing, disc throwing, wrestling)
- The last and fifth day was reserved for declaration of the winners and distribution of prizes