

TERMINOLOGY, PLANES & DIRECTIONS

Pages 1 - 4

The background of the slide is a solid blue color. In the lower right quadrant, there are several faint, concentric white circles that resemble ripples on water, creating a subtle decorative pattern.

Anatomical position

All anatomical descriptions are expressed in relation to **one consistent position**, ensuring that descriptions are not ambiguous

Standing erect with

- head, eyes and toes directed forward
- arms adjacent to the sides with the palms facing forward
- lower limbs close together with the feet parallel

Anatomical cuts and planes



Median plane

- the vertical plane passing longitudinally through the body
- divides the body into right and left halves

Sagittal planes

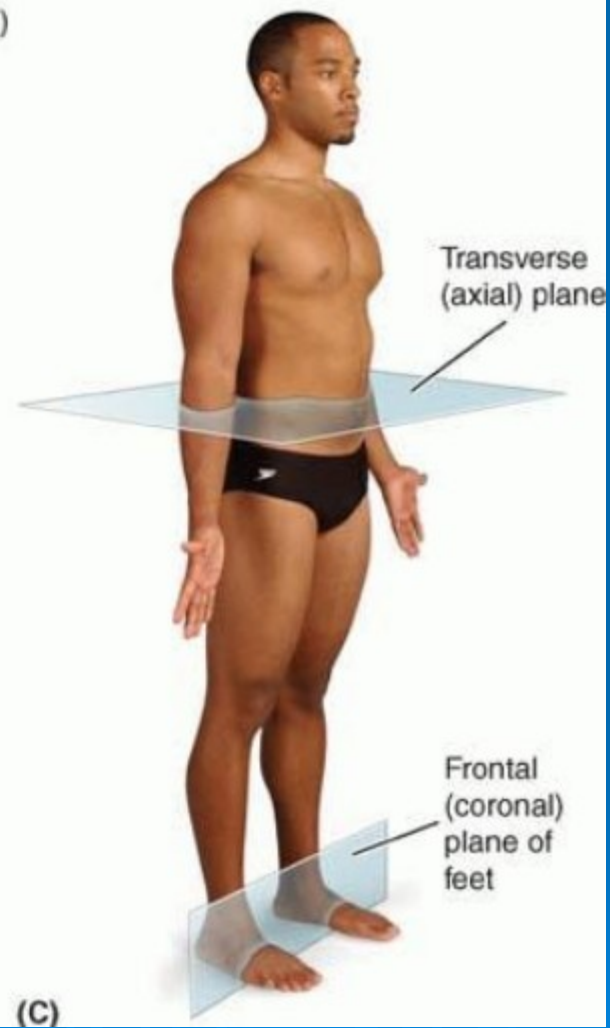
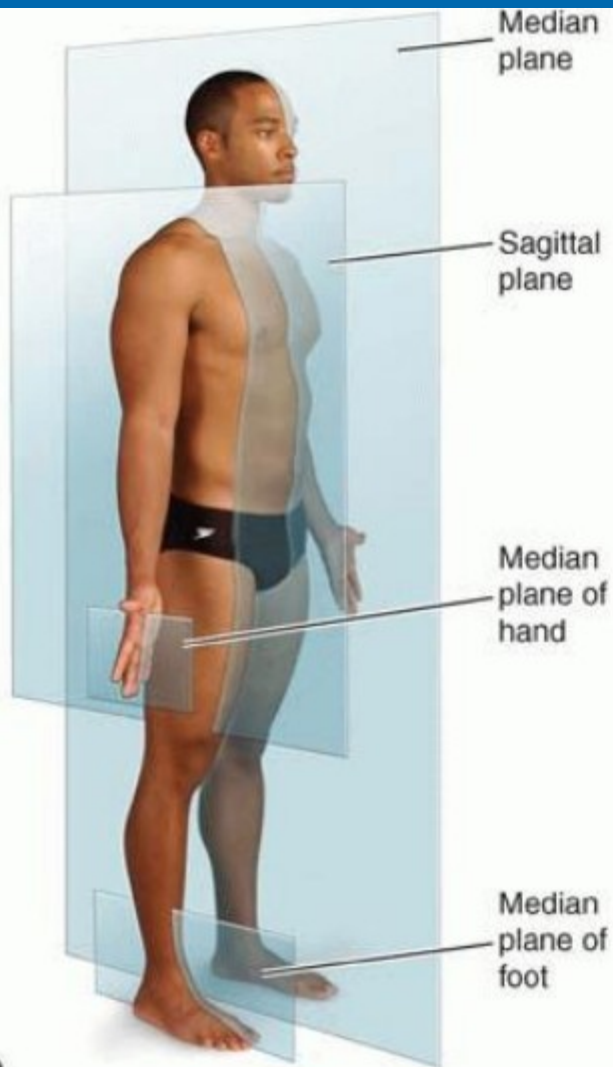
- vertical planes passing through the body parallel to the median plane
- divides the body into unequal right and left parts

Frontal (coronal) planes

- vertical planes passing through the body at right angles to the median plane
- divides the body into anterior (front) and posterior (back) parts

Transverse planes

- horizontal planes passing through the body at right angles to the median and frontal planes
- divides the body into superior (upper) and inferior (lower) parts



Longitudinal sections

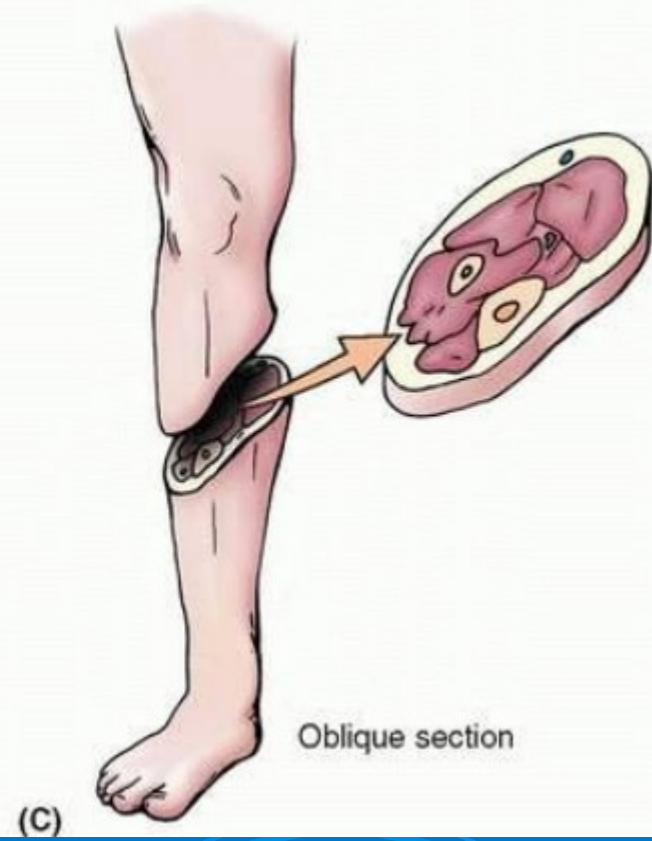
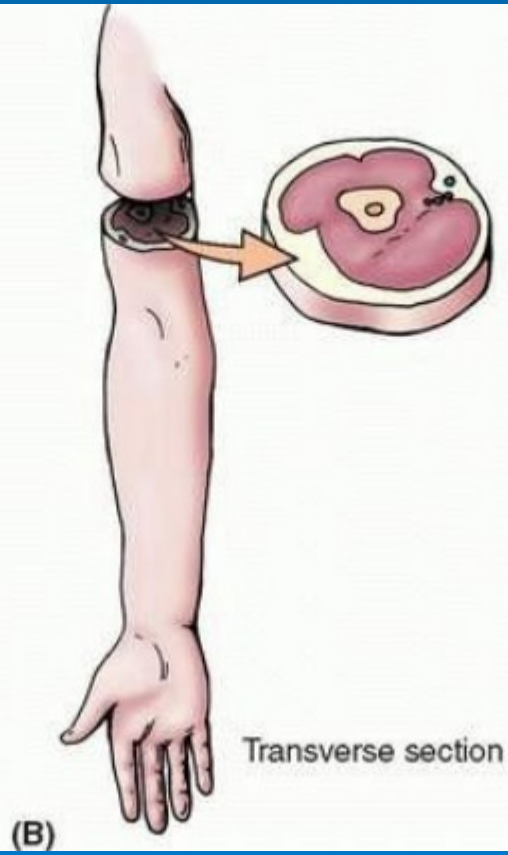
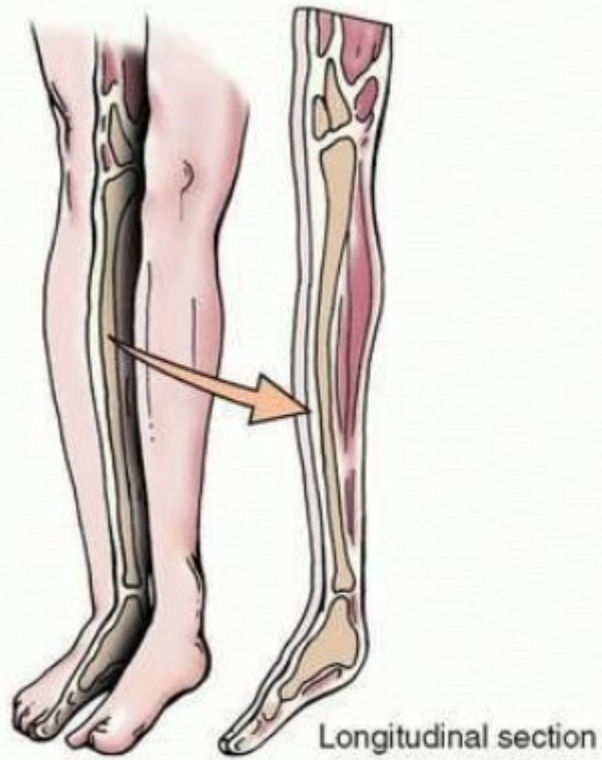
- run lengthwise or parallel to the long axis of the body or of any of its parts

Transverse (cross) sections

- run at right angles to the longitudinal axis of the body or of any of its parts

Oblique sections

- slices of the body or any of its parts that are not cut along the previously listed anatomical planes



(A)

(B)

(C)

Terms of relationship



Anterior or ventral

- toward the front of the body

Posterior or dorsal

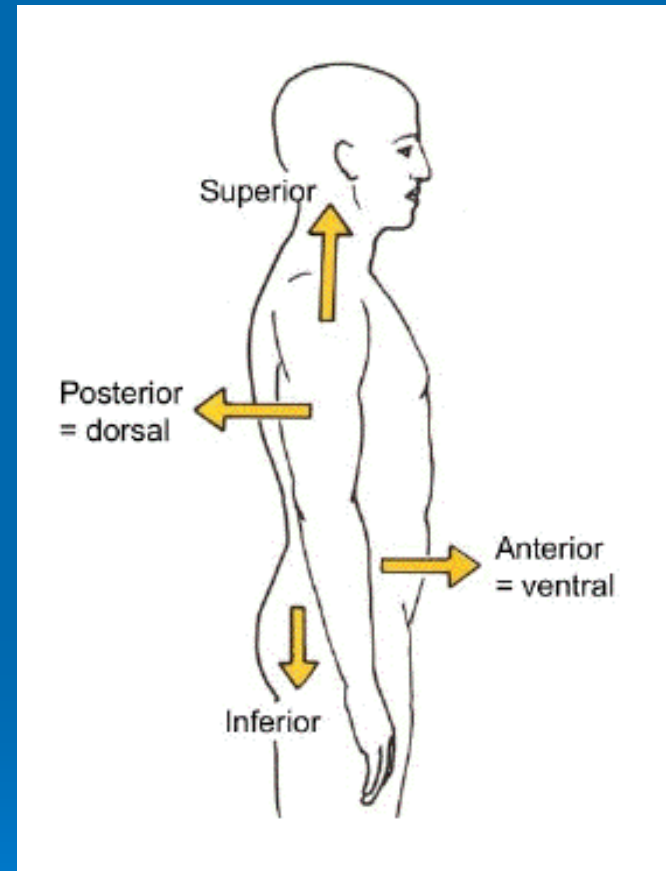
- toward the back of the body

Superior or cranial

- toward the top of the body

Inferior or caudal

- toward the soles of the body



Plane	Also Known As	Divisions
<u>Sagittal plane</u>	lateral or median plane	divides body into left and right parts
Frontal plane	coronal plane	divides body into anterior and posterior (front and back) parts
Transverse plane	axial or horizontal plane	divides body into superior and inferior (upper and lower) parts

Medial

- toward the median plane

Lateral

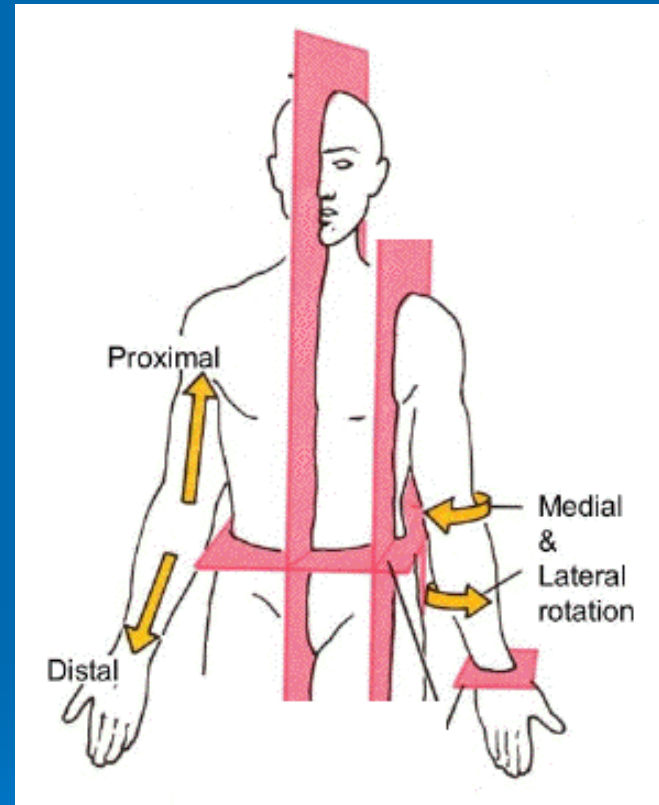
- away from the median plane

Proximal or central

- toward the trunk

Distal or peripheral

- away from the trunk



Superficial

- toward the skin of the body surface

Deep

- toward the inferior of the body

Ipsilateral or homolateral

- on the same side

Contralateral

- on the opposite side



Palmar surface of hand

- anterior surface of hand

Dorsal surface of hand

- posterior surface of hand

Plantar surface of foot

- inferior surface of foot

Dorsal surface of foot

- superior surface of foot



Terms of movement



Flexion

- decreasing the angle between the bones of the body

Extension

- increasing the angle between the bones of the body

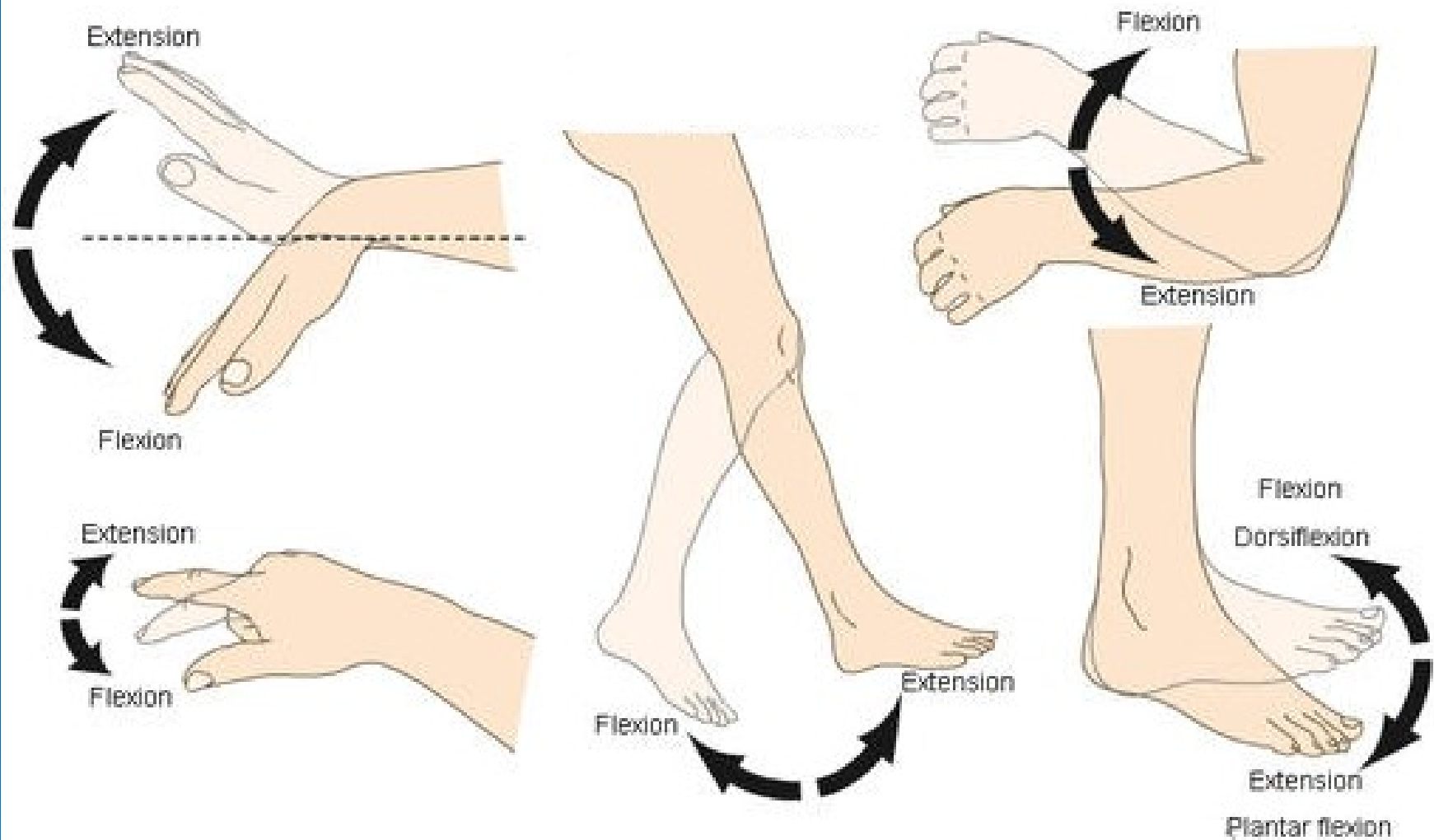
Dorsiflexion

- flexion at the ankle joint, occurs when lifting the front of the foot off the ground

Plantarflexion

- bends the foot toward the ground





Abduction

- moving away from the median plane

Adduction

- moving toward the median plane

Circumduction

- circular motion which creates a cone like shape

Rotation

- turning a part of the body around longitudinal axis



abduction



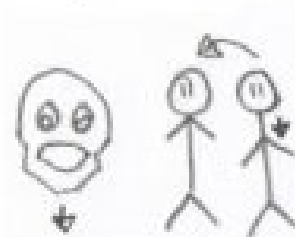
adduction



circumduction



depression



Elevation



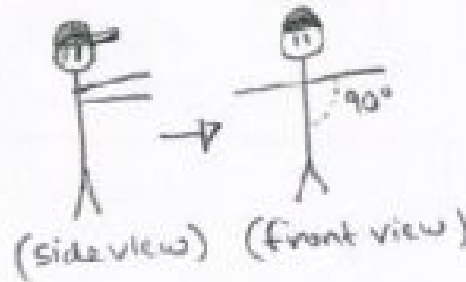
extension



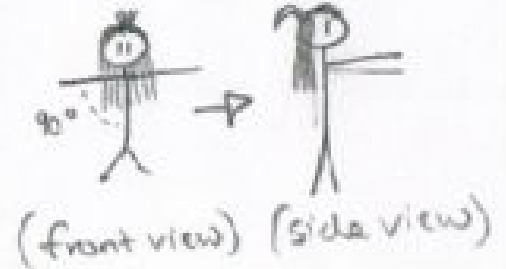
flexion



horizontal abduction



horizontal adduction



Pronation

- rotates radius medially – palm of the hand faces posteriorly and its dorsum faces anteriorly

Supination

- rotating radius laterally and uncrossing it from the ulna, returning the pronated forearm to the anatomical position

Eversion

- moves the sole of the foot away from the median plane, turning the sole laterally

Inversion

- moves the sole of the foot toward the median plane

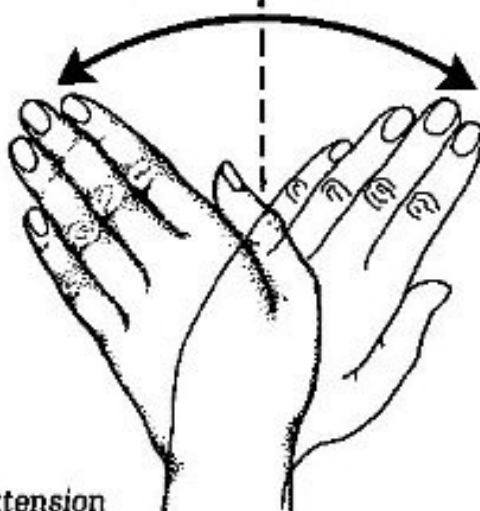
FOREARM



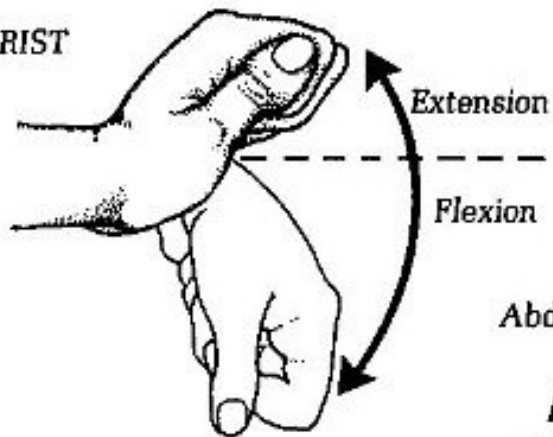
Supination Pronation

Ulnar deviation

Radial deviation



WRIST

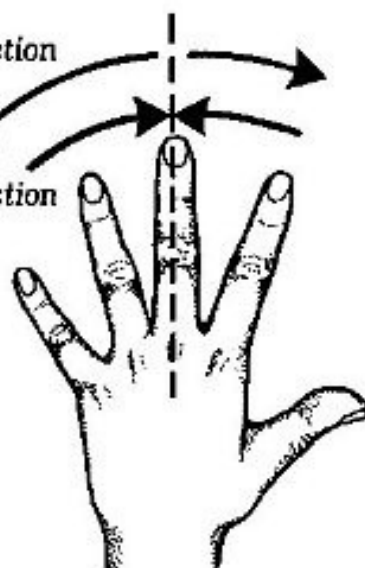


Extension

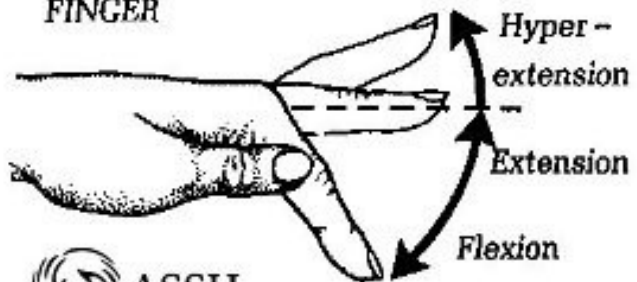
Flexion

Abduction

Adduction



FINGER



Hyper-extension

Extension

Flexion



Anteposition or opposition

- movement by which the pad of the 1st digit is brought to another digit pad

Reposition

- movement of the 1st digit back to its anatomical position

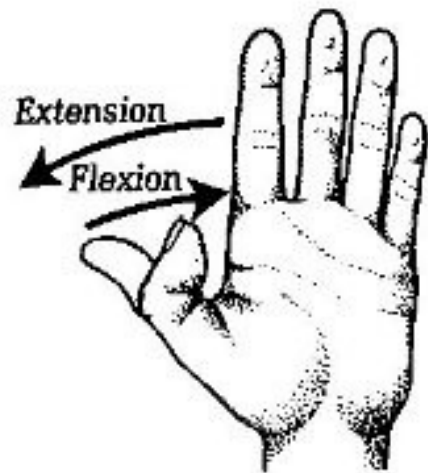
Elevation

- moves a part superiorly

Depression

- moves a part inferiorly





Opposing thumb
to finger

Anteposition
(opposition)

