KINESIOLOGY EXAM

DATE_____ NAME_____

I. Give the general location and specific action of each of the following muscles:
   a- Trapezius
   b- Biceps Brachii
   c- Hamstring group

II. Give the general location and action of five of the following:
   a- Latissmus dorsi
   b- Levator Scapulae
   c- Triceps brachii
   d- Brachioradialis
   e- Quadratus Lumborum
   f- Scaline
   g- Rectus Abdominis
   h- Pectoralis Major
   i- Levator costorum

III. What are the movements of the: (a) shoulder joint; (b) hip joint?

IV. Define:
   (a) Flexion
   (b) Extension

V. (a) Define "tonis"
   (b) At what point in body is stimulus for muscular tonis supposed to arise?

VI. Define:
   a- Epimysium
   b- Perimysium
   c- Viscosity
   d- Tetanus (two meanings)
   e- Fasciculi

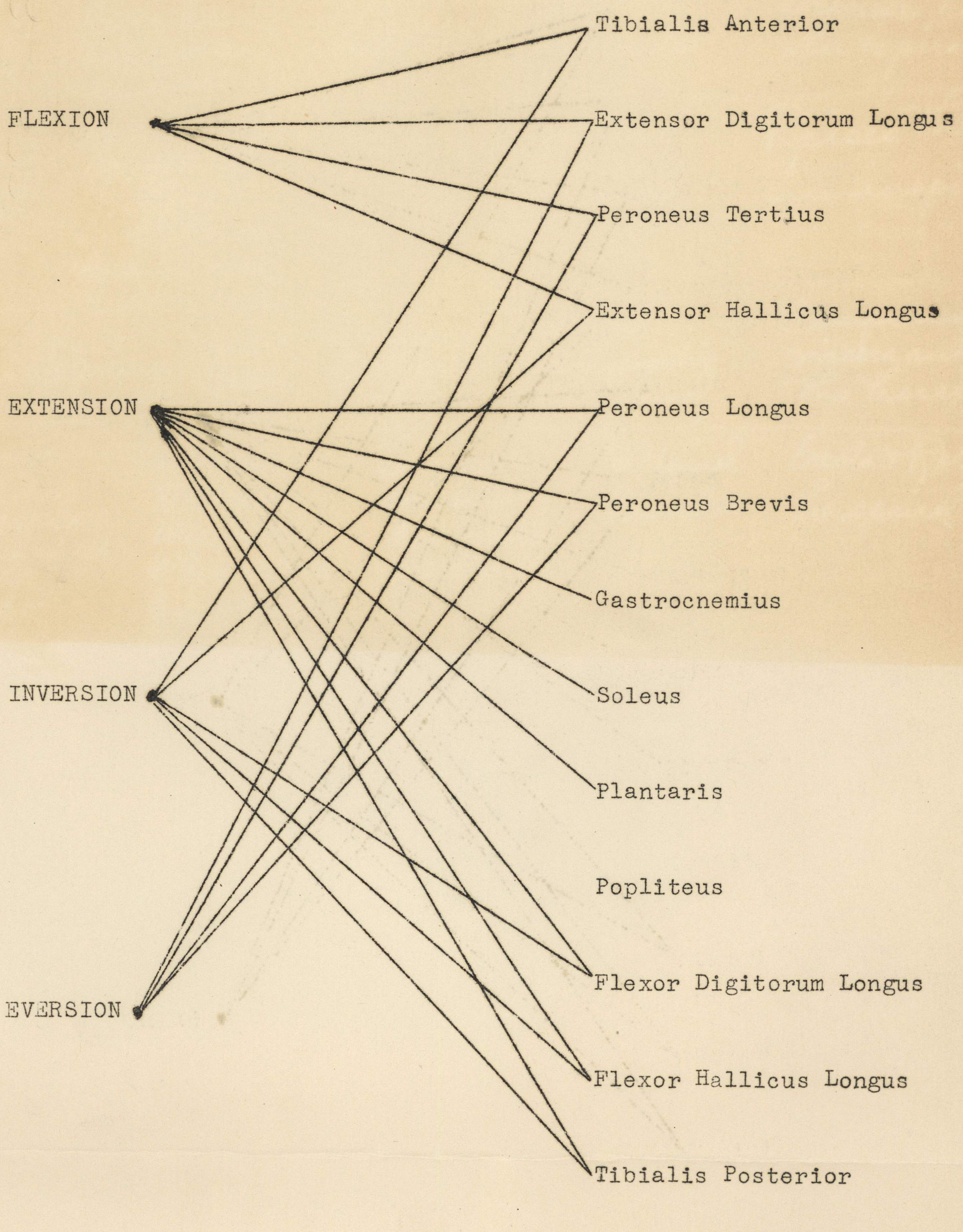
Trapezius	Dep Cr. Line of Bone P. Oc Protub. L. N. Spinous proc 7th cer 12 Thoracic	Clav + Sp. of Scap	11th Cr 3+4 Cer.		Draws Head Backward Shrugs Shoulder
Latessimus Dorsi	Crest of Ilium 3 or 4 lower ribs 6 lower Dorsal Lumbar + Sacral Vertebrae	Bicipital Groove of humerus.	Long Subscapular		Draws the arm backward + downward + rotates it inward
Deltoid (Teres minor)	Clavicle Acromian Proc. and spine scapula	Shaft of humerus.	Circumflex (axillary)		Abducts and rotates humerus
Teres Minor	Ax. Border of Scapula	Gr. Tub Humerus ant Facet?	Circumflex		Rotates humerus outward + abducts it
Teres Major	Inf Angle of Scap -	Inner lip Bicipital Gr. of humerus.	Subscapular		Draws the arm down + back
Supraspinatus	Supraspinous Fossa	Gr. Tuber. Humerus.	Suprascapular		Supports the shoulder joint Raises the arm
Subscapulas	Ventral surface of Scapula	Lesser Tub of Humerus.	Subscapular		Rotates head of the humerus inward
Infra spinatus	Inf Spin - Fossa	Gr Tub of Humerus.	Suprascapular		Rotates the humerus outward
Rhamboideus Minor	Sp's of 7 cer + 1st Thor	Root of the spine of the Scapula	5th cer.		Retracts + Elevates the scapula
Rhamboideus Major	Spines of the 5 upper Dor or Thor. Ver.	Root of the Spine Scap.	5th Cer.		Retracts + Elevates the scapula
Biceps Brachii	Long Glenoid Cor - Short Cor. Proc.	Tub of Rad Deep Fascia Fore arm	Musculo - cutaneous		Flexes + Supinates the forearm -
Triceps 3 Heads Tri. Brachialis	Ext. + Int near musculo - spiral groove Shaft of humerus middle or long - Lower margins of glenoid Cavity	Olecranon process of the ulna.	(Musculo Spiral Radial)		Extends the forearm

Pec. Major	Clav. Sternum + costal cartilages	Ext. Border Bicip. Groove	Ant Thor Exter + Internal	Draws the arm down + forward
Pec. Minor	~~3+4 Coracoid~~ Proc. 3 + 5 ribs	Coracoid Proc.	Ant Thor.	Depresses the point of the shoulder
Serratus Magnus	Upper 8 Ribs	Ventral Margin Vertebral border of scapula	Post. Thor.	Elevates the ribs in inspiration
Serratus Post. Inf.	Spines of last 2 dorsal and first 3 lumbar	4 lower ribs	10th + 11th intercostal	Depresses the ribs in expiration
Ser. Post Superior	Spines of 2nd 3 + 4 + 5th Ribs Sp of 7th Cer and 2 upper dorsal	2, 3, 4 and 5th Ribs	Post Br of the Cervical	Raises the ribs in inspiration
Rectus abdominis	Pubic Crest.	Cartilages of the 5th to 7th Ribs	Intercostal ilio-hypogastric ilioinguinal	Compresses the viscera and flexes the thorax
Multifidus Spinæ	Dorsum ilias spine artic proc. of lumbar + Cer Ver. + trans proc. of dorsal + 7th Cer.	Laminæ + spines from last lumbar to 2nd cer Ver.	Post Spinal Branches	Erects + Rotates the spinal column.
Erector Spinæ (Sacro spinalis)	Iliac Crest Back of Sacrum lumbar + 3 lower dorsal spines	Divides into the sacro-lumbalis and longissimus dorsi + spinalis dorsi	Lumbar Nerves Post Div.	Extension of spinal column on pelvis Rotation
Iliacus	Iliac ~~Crest~~ Fossa Crest, base of The sacrum	Lesser Trochanter	Anter Crural	Flexes + rotates the femur outward
Pronator	Supinator	Flexor, Extensor		

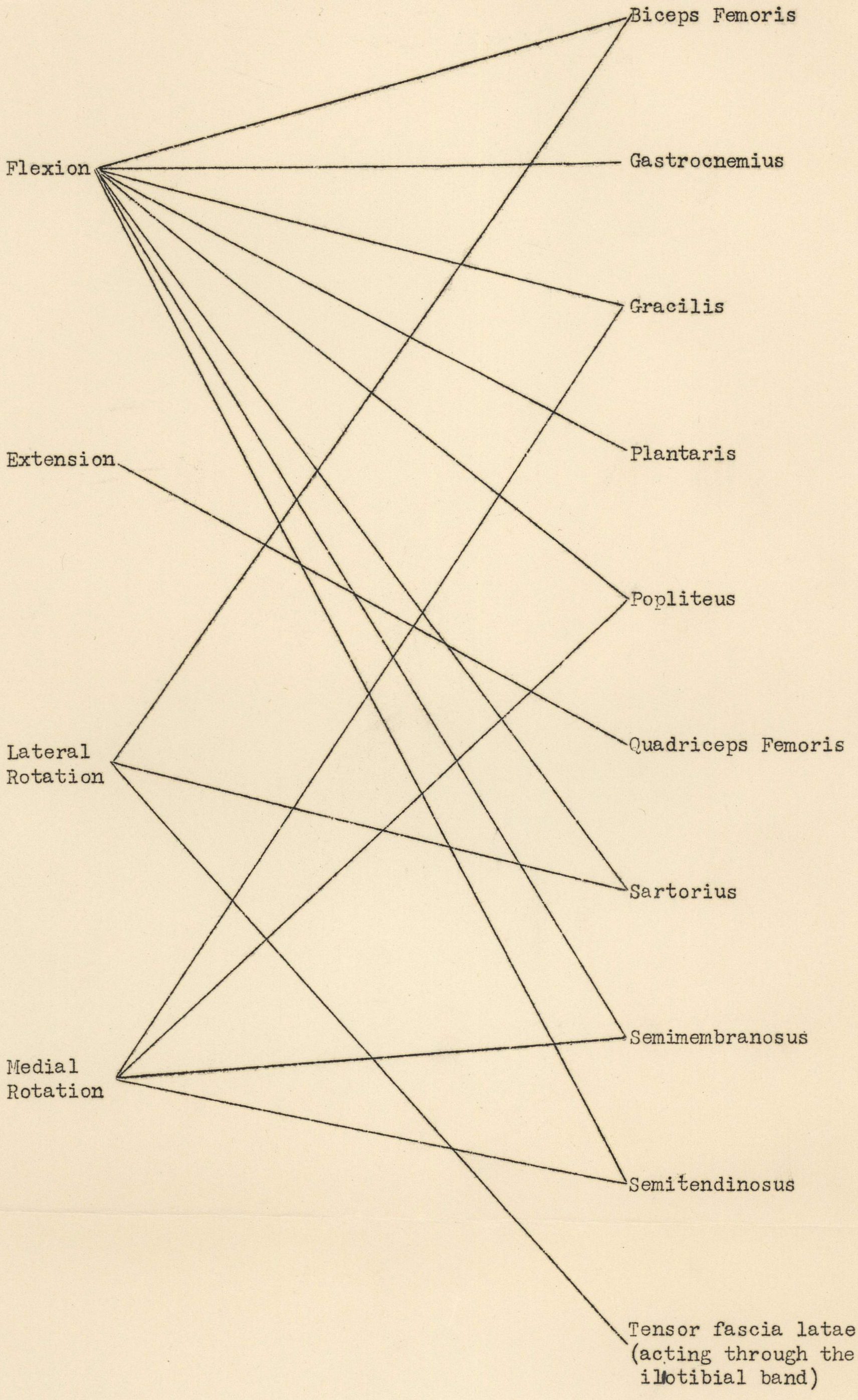
DR. F.C. ALLEN

MOVEMENTS OF THE ANKLE JOINT AND THE MUSCLES

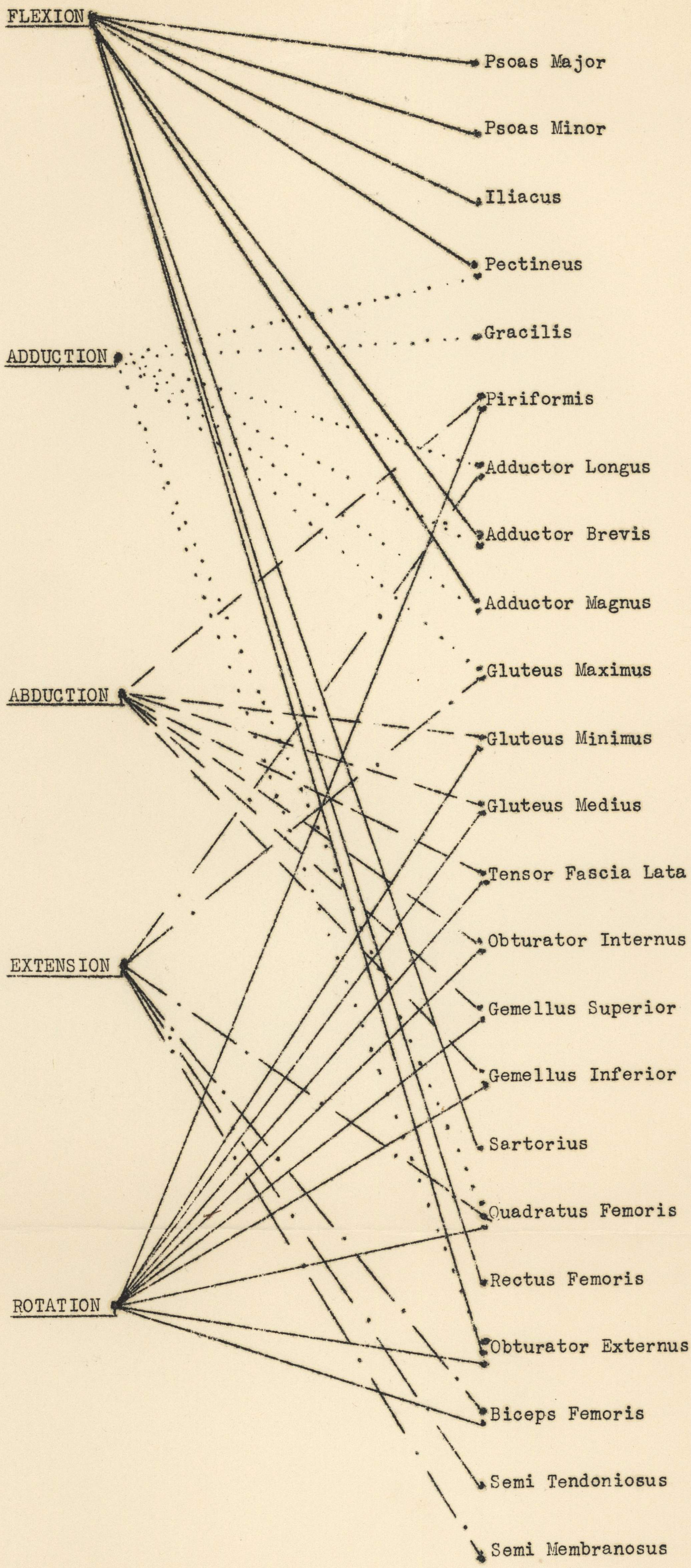
PRODUCING THESE ACTIONS



MOVEMENTS OF THE KNEE JOINT

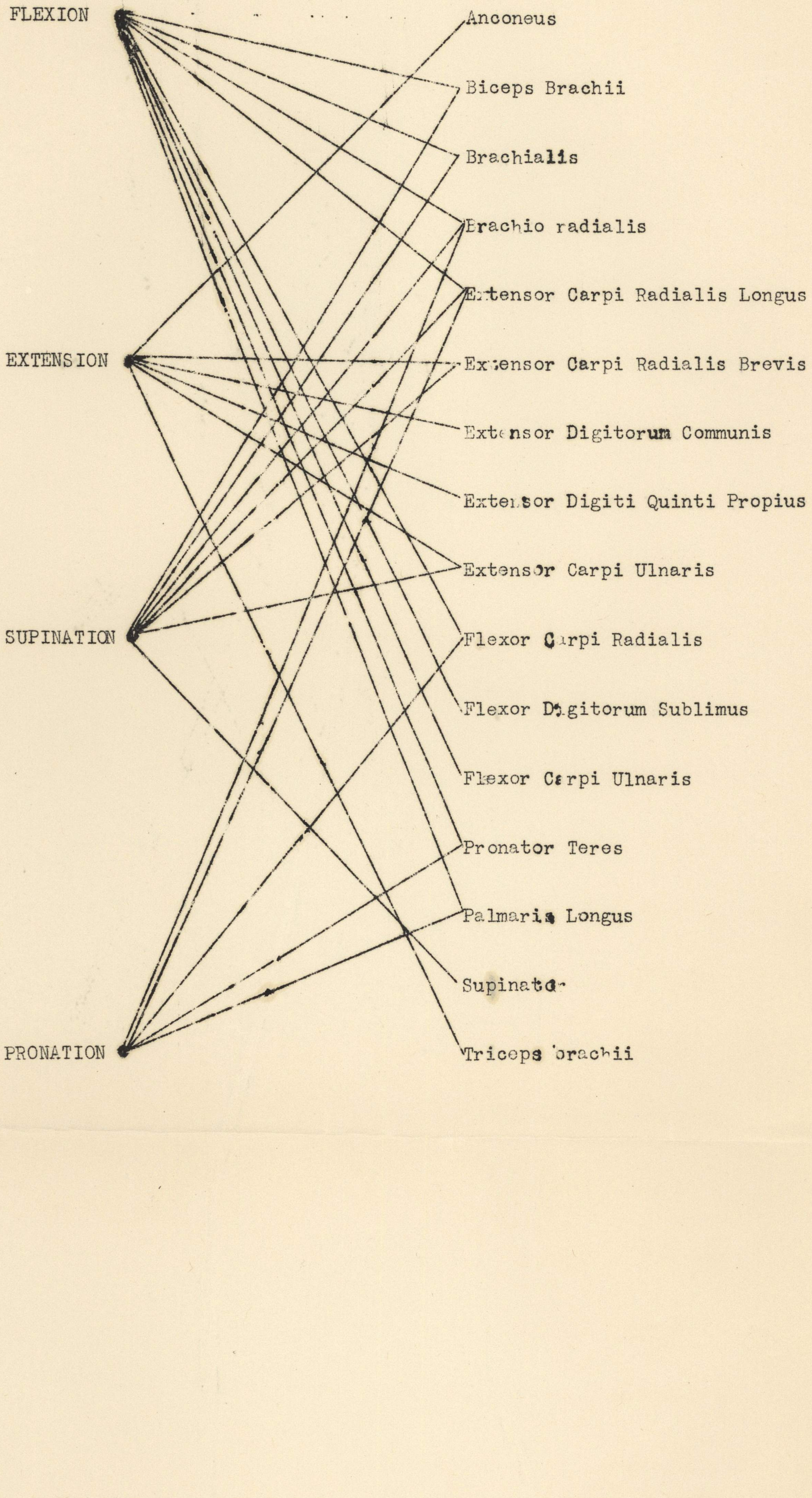


MUSCULATURE OF THE HIP AND THIGH



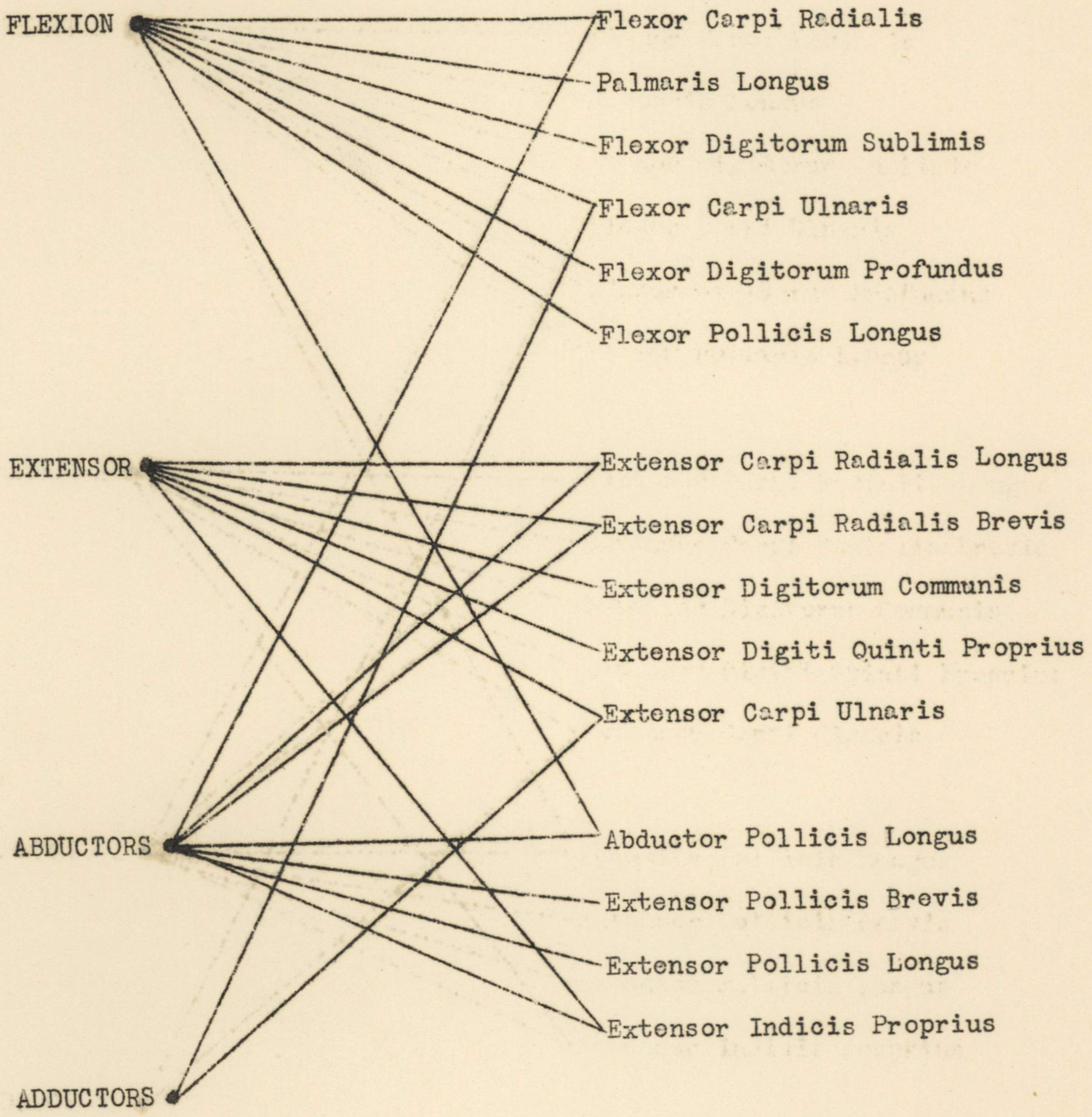
MOVEMENTS OF THE ELBOW JOINT AND THE MUSCLES

PRODUCING THESE ACTIONS

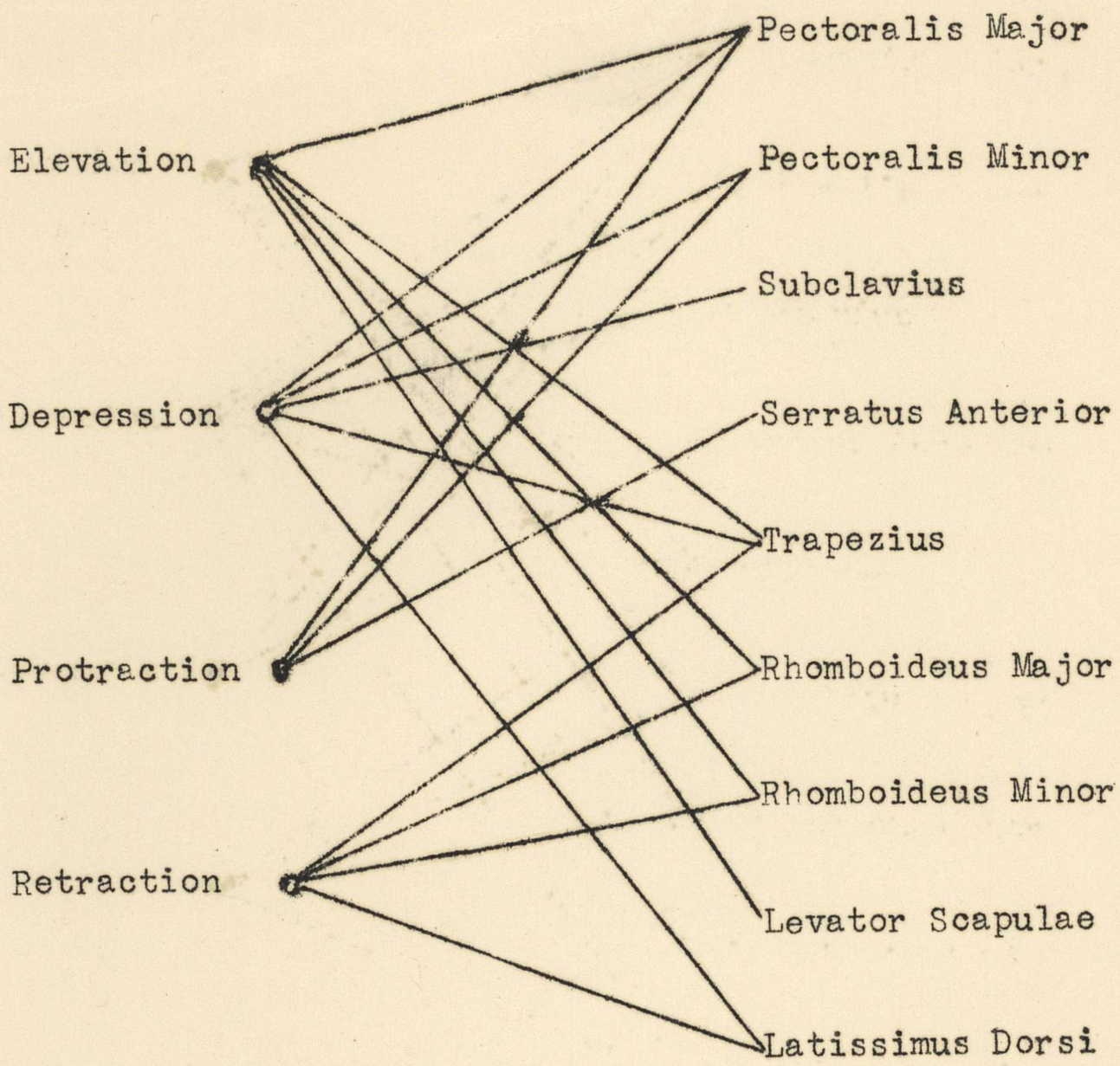


MOVEMENTS OF THE WRIST JOINT AND THE MUSCLES

PRODUCING THESE ACTIONS



MUSCLES OF THE SHOULDER-GIRDLE



MOVEMENTS OF THE SHOULDER GIRDLE

Forward - Protraction
Upward - Elevation
Backward - Retraction
Downward - Depression
Combinations - Rotation

The shoulder is an enarthrodial (Ball and Socket) joint. The articulation is formed by the head of the humerus and the glenoid fossa.

LIGAMENTS OF THE SHOULDER JOINT

Capsular Gleno-Humeral Coraco-Humeral Transverse-Humeral and the Glenoid

KINESIOLOGY

1. Define the following:
   (a) Anatomy
   (b) Physiology
   (c) Kinesiology
   (d) Syndesmology
   (e) Osteology
   (f) Neurology
   (g) Myology
   (h) Histology

2. What is a cell? What is the difference between a cell, an organ, and a system?

3. Discuss what is meant by an exciting cause and a predisposing cause and give an example illustrating each.

4. What is meant by abduction and adduction in physical education? What is the difference between rotation and circumduction?

5. What is a "charley horse"? Explain the kinesiological relationship between extension and flexion, and a "charley horse."

6. List and describe three types of muscle tissue. Give examples of each.

7. Draw a diagram of a muscle cell and label sarcalemma, sarcaplasm, sarcomeres, sarcostyles and myo-neural junction.

8. A typical skeletal muscle consists of:
   (a)_____
   (b)_____
   (c)_____
   (d)_____

9. What is the approximate chemical composition of a muscle? What is a "property?" Give the properties of muscle tissue.

10. Name a muscle or ligament that derives its name from:
   (a) Location
   (b) Points of attachment
   (c) Shape
   (d) Structure
   (e) Direction
   (f) Function

11. Explain the difference between: Give examples of each.
   (a) prime movers
   (b) antagonists
   (c) fixation muscles

12. Draw a diagram of a motor neurone and label dendrites, nerve call, nucleus, axis cylinder, neurilemma, medullary sheath, and terminal branch.

13. Give the function of
   (a) nerve cell and its nucleus
   (b) axix cylinder
   (c) Neurilemma
   (d) dendrites

14. What is a lever? What is the relationship between levers and kinesiology?

15. What is a synovitis? What is a symphesis? Joints are classified as:
   (a)_____
   (b)_____
   (c)_____

16. What is the difference between cranial and spinal nerves? Name the 12 pairs of cranial nerves. Name the 31 pairs of spinal nerves. Name the sympathetic nerves.

17. What muscles are called the hamstrings, and why are they important?

18. In punting a football
   (a) What muscles of the limb are employed?
   (b) How do these muscles act on the pelvis?

19. What muscles effect flexion and extension of the knee?

20. What is the work of the following muscles in relation to the movement of the ankle joint:
   (a) tibialis anterior
   (b) Plantaris
   (c) gastrocnemius

21. Give three (3) ways in which the tensor facia lata affects movement.

22. Describe the general movements of the shoulder girdle; the kind of joint; and the ligaments involved in the shoulder joint.

23. What muscles of elbow joint produce supination and extension? What is the difference between supination and pronation? Name the pronators and flexors.

24. What nerves are involved in the reflex arc.

25. The instructor tells the student in their minds eye to lick their tonge over a lemon. What action takes place over the nervous system?

unstable
photograph
perhaps X ray?

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