

15 REVIEW SHEET

EXERCISE

NAME _____

LAB TIME/DATE _____

Gross Anatomy of the Muscular System

Classification of Skeletal Muscles

1. Several criteria were given for the naming of muscles. Match the criteria (column B) to the muscle names (column A). Note that more than one criterion may apply in some cases.

Column A	Column B
<u>e, g</u> 1. gluteus maximus	a. action of the muscle
<u>a, g</u> 2. adductor magnus	b. shape of the muscle
<u>d, e</u> 3. biceps femoris	c. location of the origin and/or insertion of the muscle
<u>e, f</u> 4. transversus abdominis	d. number of origins
<u>a, c, e</u> 5. extensor carpi ulnaris	e. location of the muscle relative to a bone or body region
<u>b</u> 6. trapezius	f. direction in which the muscle fibers run relative to some imaginary line
<u>e, f</u> 7. rectus femoris	g. relative size of the muscle
<u>e, f</u> 8. external oblique	

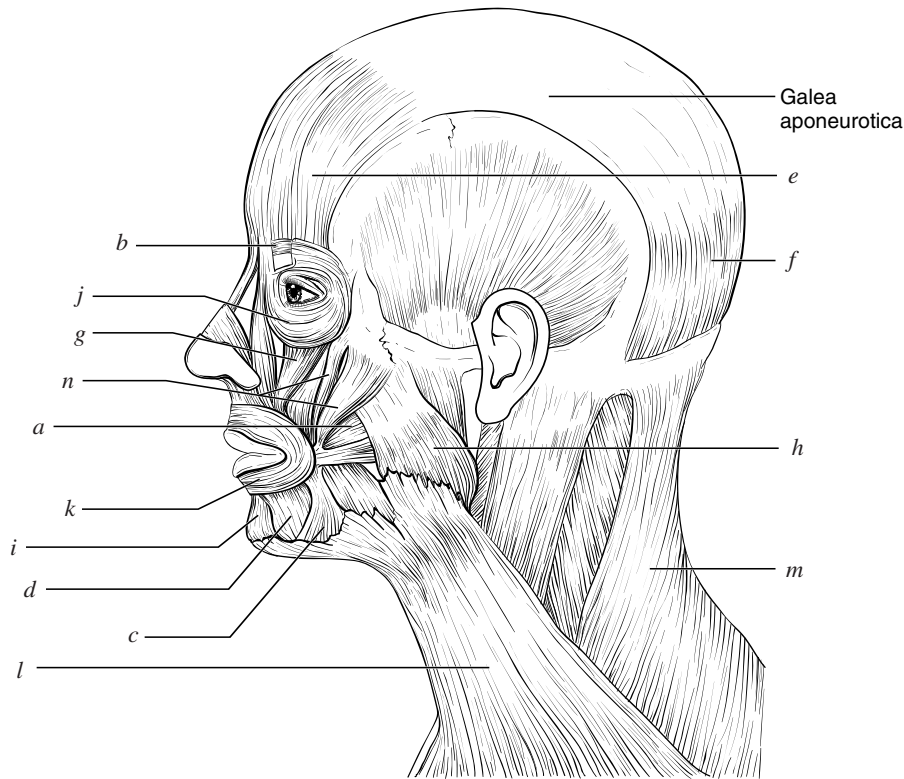
2. Match the key terms to the muscles and movements described below.

Key: a. prime mover (agonist) b. antagonist c. synergist d. fixator

- a; prime mover 1. term for the biceps brachii during elbow flexion
- c; synergist 2. term that describes the relation of brachialis to biceps brachii during elbow flexion
- b; antagonist 3. term for the triceps brachii during elbow flexion
- b; antagonist 4. term for the iliopsoas during hip extension
- a; prime mover 5. term for the gluteus maximus during hip extension when walking up stairs
- d; fixator 6. term for the rotator cuff muscles and deltoid when the elbow is flexed and the hand grabs a tabletop to lift the table

Muscles of the Head and Neck

3. Using choices from the key at the right, correctly identify muscles provided with leader lines on the diagram.



Key:

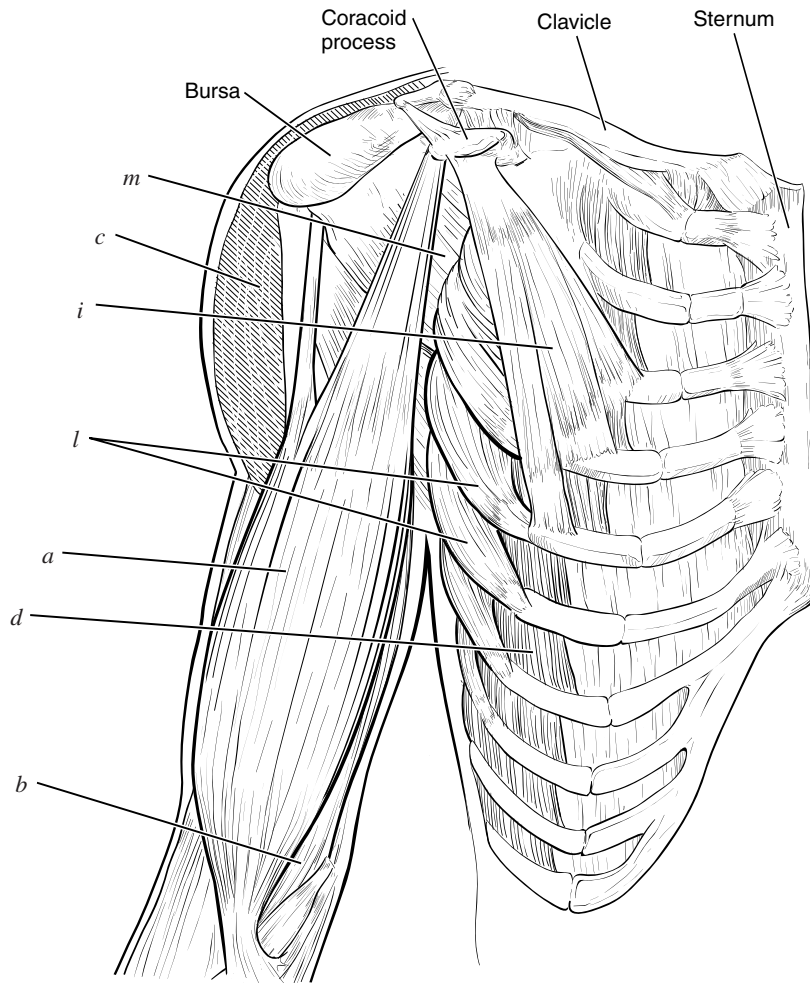
- a. buccinator
- b. corrugator supercilii
- c. depressor anguli oris
- d. depressor labii inferioris
- e. epicraniius (frontal belly)
- f. epicraniius (occipital belly)
- g. levator labii superioris
- h. masseter
- i. mentalis
- j. orbicularis oculi
- k. orbicularis oris
- l. platysma
- m. trapezius
- n. zygomaticus major and minor

4. Using the key provided in question 3, identify the muscles described next.

- | | |
|--|--|
| <u>n</u> 1. used in smiling | <u>b</u> 6. used to form the vertical frown crease on the forehead |
| <u>a</u> 2. used to suck in your cheeks | <u>k</u> 7. your "kisser" |
| <u>j</u> 3. used in blinking and squinting | <u>h</u> 8. prime mover to raise the mandible |
| <u>c</u> 4. used to pout (pulls the corners of the mouth downward) | <u>l</u> 9. tenses skin of the neck during shaving |
| <u>e</u> 5. raises your eyebrows for a questioning expression | |

Muscles of the Trunk

5. Correctly identify both intact and transected (cut) muscles depicted in the diagram, using the key given at the right. (Not all terms will be used in this identification.)



Key:

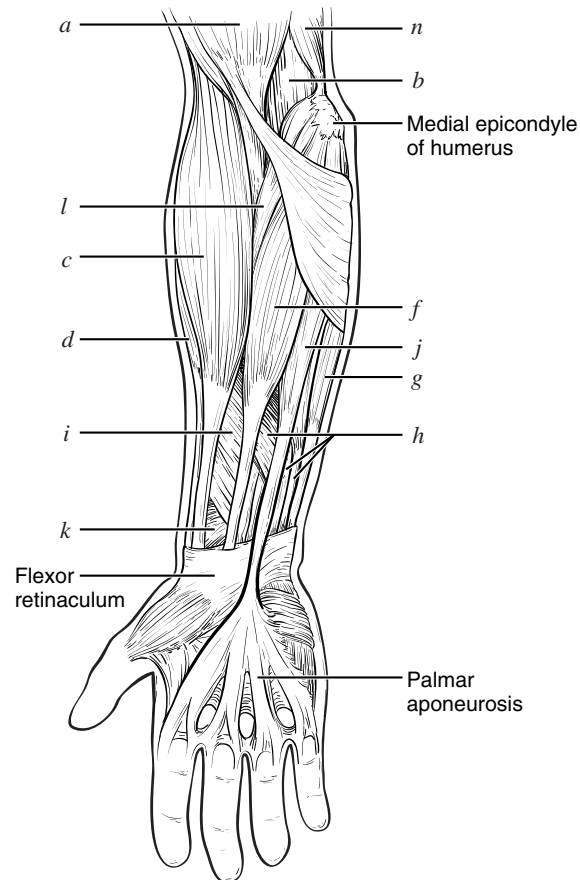
- a. biceps brachii
- b. brachialis
- c. deltoid (cut)
- d. external intercostals
- e. external oblique
- f. internal oblique
- g. latissimus dorsi
- h. pectoralis major
- i. pectoralis minor
- j. rectus abdominis
- k. rhomboids
- l. serratus anterior
- m. subscapularis
- n. transversus abdominis
- o. trapezius

6. Using the key provided in question 5 above, identify the major muscles described next.

- | | |
|--|--|
| <u>j</u> 1. a major spine flexor | <u>g, h</u> 6. important in shoulder adduction; antagonists of the shoulder abductor (two muscles) |
| <u>g</u> 2. prime mover for arm extension | <u>l</u> 7. moves the scapula forward and rotates scapula upward |
| <u>h</u> 3. prime mover for arm flexion | <u>d</u> 8. small, inspiratory muscles between the ribs; elevate the ribs |
| <u>e, f, n, (j)</u> 4. assume major responsibility for forming the abdominal girdle (three pairs of muscles) | <u>o</u> 9. extends the head |
| <u>c</u> 5. prime mover of shoulder abduction | <u>k</u> 10. pull the scapulae medially |

Muscles of the Upper Limb

7. Using terms from the key on the right, correctly identify all muscles provided with leader lines in the diagram. (Note that not all the listed terms will be used in this exercise.)



Key:

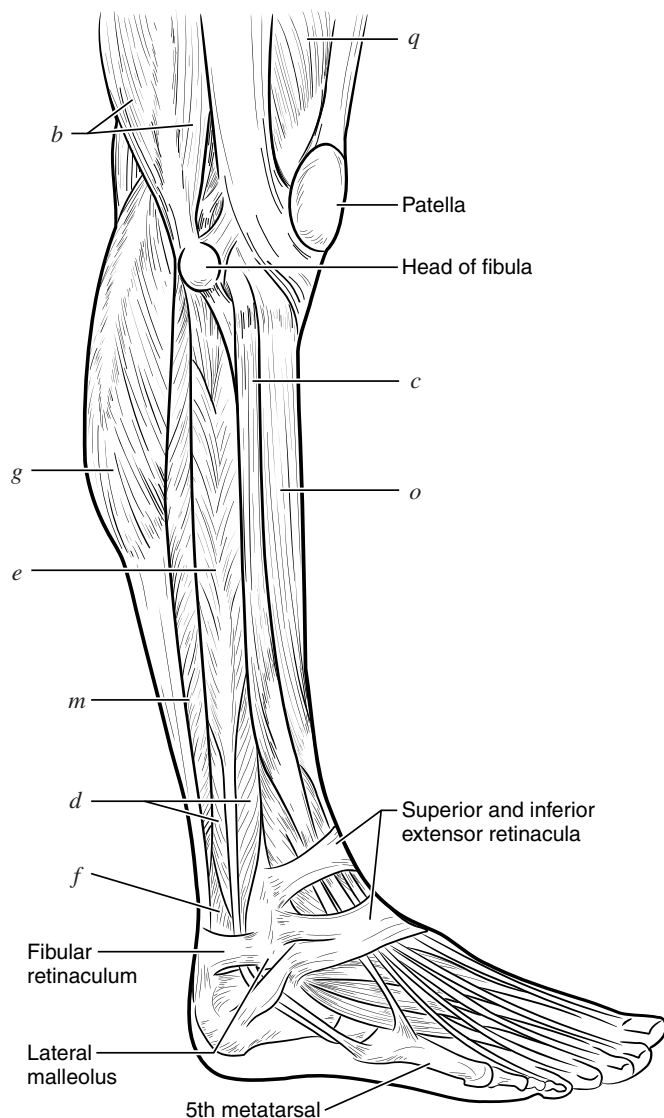
- a. biceps brachii
- b. brachialis
- c. brachioradialis
- d. extensor carpi radialis longus
- e. extensor digitorum
- f. flexor carpi radialis
- g. flexor carpi ulnaris
- h. flexor digitorum superficialis
- i. flexor pollicis longus
- j. palmaris longus
- k. pronator quadratus
- l. pronator teres
- m. supinator
- n. triceps brachii

8. Use the key provided in question 7 to identify the muscles described next.

- | | | | |
|-------------------|---|-------------------|--|
| <u>a</u> _____ | 1. flexes the forearm and supinates the hand | <u>k, l</u> _____ | 7. pronate the hand (two muscles) |
| <u>m</u> _____ | 2. synergist for supination of hand | <u>i</u> _____ | 8. flexes the thumb |
| <u>b, c</u> _____ | 3. forearm flexors; no role in supination (two muscles) | <u>d</u> _____ | 9. extends and abducts the wrist |
| <u>n</u> _____ | 4. elbow extensor | <u>e</u> _____ | 10. extends the wrist and digits |
| <u>f</u> _____ | 5. power wrist flexor and abductor | <u>j</u> _____ | 11. flat muscle that is a weak wrist flexor; tenses skin of the palm |
| <u>h</u> _____ | 6. flexes wrist and middle phalanges | | |

Muscles of the Lower Limb

9. Using the terms from the key on the right, correctly identify all muscles provided with leader lines in the diagram below. (Not all listed terms will be used in this exercise.)



Key:

- a. adductor group
- b. biceps femoris
- c. extensor digitorum longus
- d. fibularis brevis
- e. fibularis longus
- f. flexor hallucis longus
- g. gastrocnemius
- h. gluteus maximus
- i. gluteus medius
- j. rectus femoris
- k. semimembranosus
- l. semitendinosus
- m. soleus
- n. tensor fasciae latae
- o. tibialis anterior
- p. tibialis posterior
- q. vastus lateralis

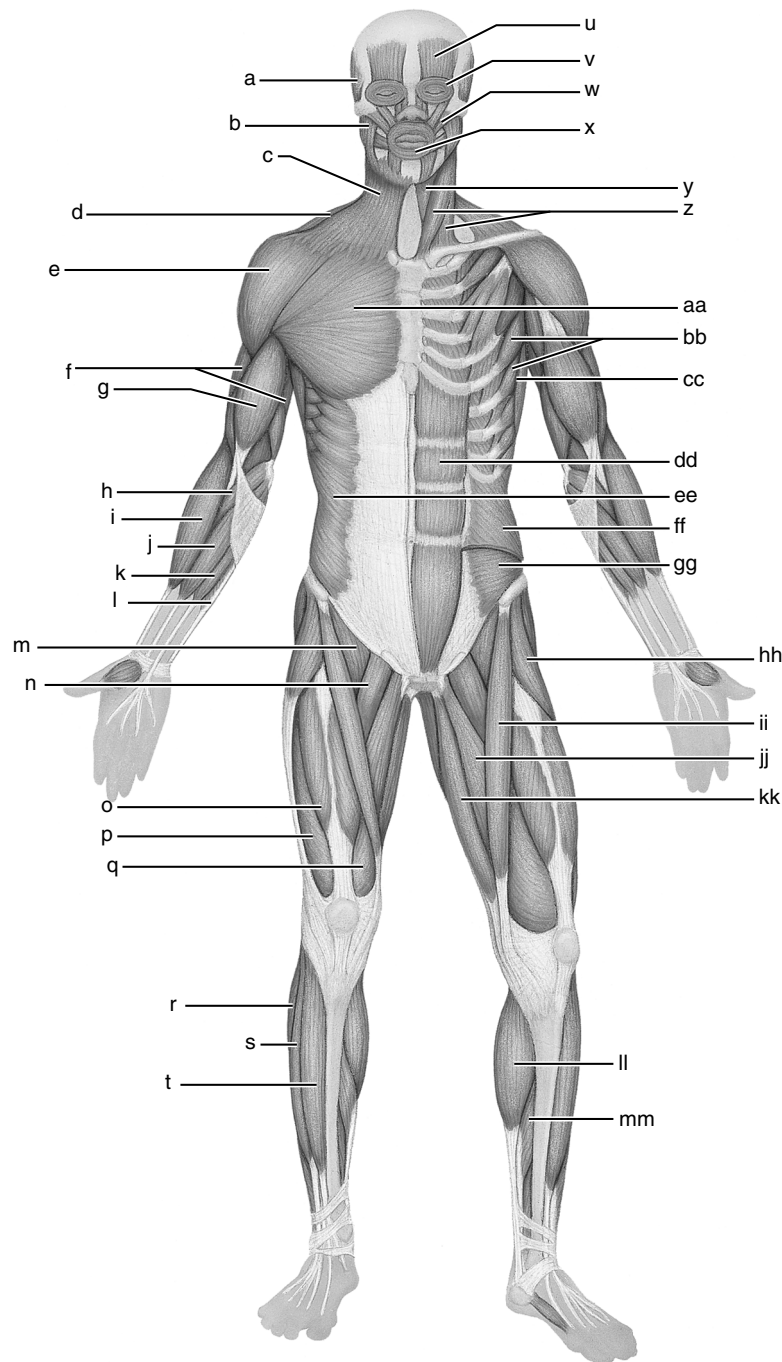
10. Use the key terms in question 9 to respond to the descriptions below.

- | | | | |
|-------------------|---|----------------------|--|
| <u>f</u> _____ | 1. flexes the great toe and inverts the foot | <u>p</u> _____ | 6. prime mover of inversion of the foot |
| <u>d, e</u> _____ | 2. lateral compartment muscles that plantar flex and evert the foot (two muscles) | <u>o</u> _____ | 7. prime mover of dorsiflexion of the foot |
| <u>i, n</u> _____ | 3. abduct the thigh to take the "at ease" stance (two muscles) | <u>a</u> _____ | 8. adduct the thigh, as when standing at attention |
| <u>h</u> _____ | 4. used to extend the hip when climbing stairs | <u>c</u> _____ | 9. extends the toes |
| <u>g, m</u> _____ | 5. prime movers of plantar flexion (two muscles) of the foot | <u>b, k, l</u> _____ | 10. extend thigh and flex knee (three muscles) |
| | | <u>j</u> _____ | 11. extends knee and flexes thigh |

General Review: Muscle Recognition

11. Identify the lettered muscles in the diagram of the human anterior superficial musculature by matching the letter with one of the following muscle names:

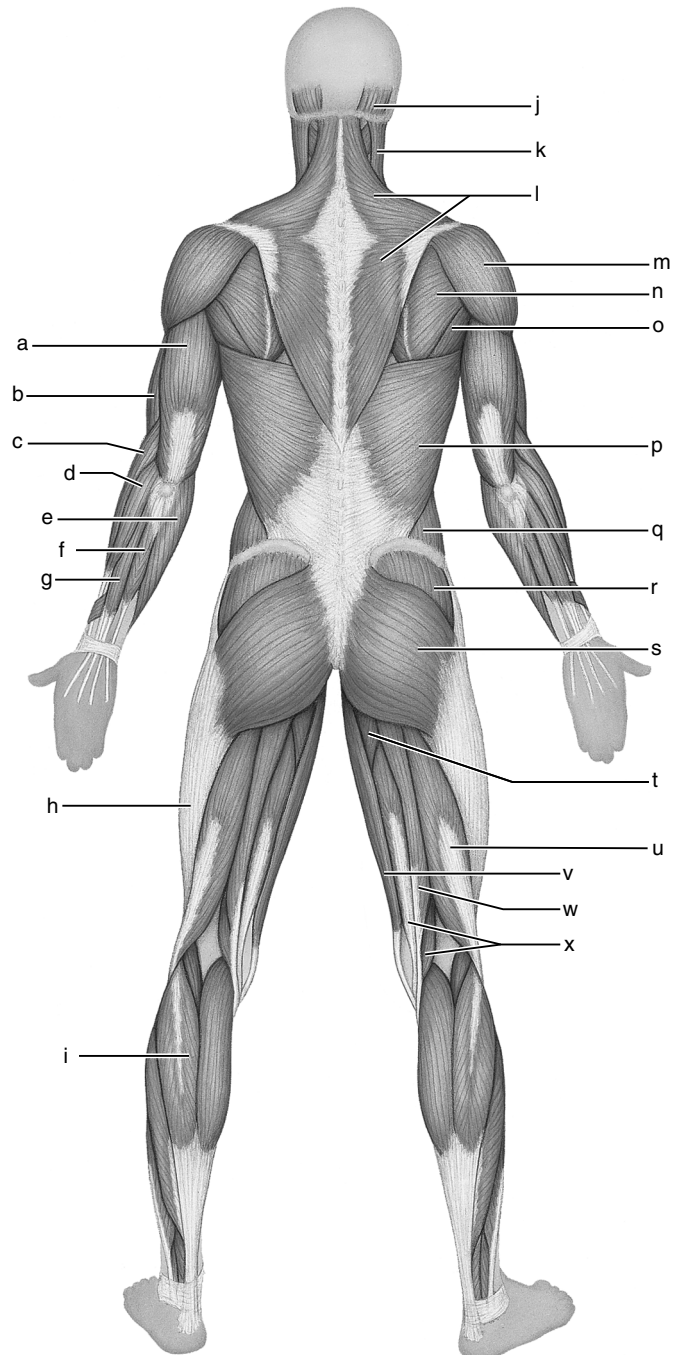
- jj 1. adductor longus
- g 2. biceps brachii
- i 3. brachioradialis
- e 4. deltoid
- s 5. extensor digitorum longus
- ee 6. external oblique
- r 7. fibularis longus
- j 8. flexor carpi radialis
- l 9. flexor carpi ulnaris
- u 10. frontalis
- ll 11. gastrocnemius
- kk 12. gracilis
- m 13. iliopsoas
- ff 14. internal oblique
- cc 15. latissimus dorsi
- b 16. masseter
- v 17. orbicularis oculi
- x 18. orbicularis oris
- k 19. palmaris longus
- n 20. pectineus
- aa 21. pectoralis major
- c 22. platysma
- h 23. pronator teres
- dd 24. rectus abdominis
- o 25. rectus femoris
- ii 26. sartorius
- bb 27. serratus anterior
- mm 28. soleus
- z 29. sternocleidomastoid
- y 30. sternohyoid



- a 31. temporalis
- hh 32. tensor fasciae latae
- t 33. tibialis anterior
- gg 34. transversus abdominis
- d 35. trapezius
- f 36. triceps brachii
- p 37. vastus lateralis
- q 38. vastus medialis
- w 39. zygomaticus

12. Identify each of the lettered muscles in this diagram of the human posterior superficial musculature by matching its letter to one of the following muscle names:

- t 1. adductor magnus
- u 2. biceps femoris
- b 3. brachialis
- c 4. brachioradialis
- m 5. deltoid
- d 6. extensor carpi radialis longus
- f 7. extensor carpi ulnaris
- g 8. extensor digitorum
- q 9. external oblique
- e 10. flexor carpi ulnaris
- i 11. gastrocnemius
- s 12. gluteus maximus
- r 13. gluteus medius
- v 14. gracilis
- h 15. iliotibial tract (tendon)
- n 16. infraspinatus
- p 17. latissimus dorsi
- j 18. occipitalis
- x 19. semimembranosus
- w 20. semitendinosus
- k 21. sternocleidomastoid
- o 22. teres major
- l 23. trapezius
- a 24. triceps brachii



General Review: Muscle Descriptions

13. Identify the muscles described by completing the following statements.

1. The deltoid, vastus lateralis, gluteus maximus, and gluteus medius are commonly used for intramuscular injections (four muscles).
2. The insertion tendon of the quadriceps group contains a large sesamoid bone, the patella.
3. The triceps surae insert in common into the calcaneal tendon.
4. The bulk of the tissue of a muscle tends to lie proximal to the part of the body it causes to move.
5. The extrinsic muscles of the hand originate on the humerus, radius, and ulna.
6. Most flexor muscles are located on the anterior aspect of the body; most extensors are located posteriorly. An exception to this generalization is the extensor-flexor musculature of the knee.