

Strength Training Anatomy

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Learning Objectives:

Strength Training Anatomy

Correspondence Course

After reading Strength Training Anatomy you will be able to:

1. Understand the primary actions of the biceps muscle.
2. Identify three positions used to perform dumbbell curls and the muscles emphasized by each position.
3. Identify specific exercises that can be used to emphasize the biceps brachii muscle.
4. Identify specific exercises that can be used to emphasize the brachialis and brachioradialis.
5. Identify specific exercises that can be used to work the wrist flexors and extensors.
6. Understand why the wrist joint might be weak.
7. Understand the difference between pronation and supination.
8. Identify which exercise would be appropriate for a beginner to use to strengthen their triceps.
9. Identify specific exercises that can be used to focus on the medial head, the long head and the lateral head of the triceps.
10. Identify specific exercises that can be used to work the entire triceps group.
11. Identify which exercises would not be recommended for those with a rotator cuff injury.
12. Identify modifications to overhead exercises to protect the spine.
13. Know the correct form to use to complete bent-over lateral raises.
14. Know the correct form to use to complete barbell front raises.
15. Know the correct form to use to complete upright rows.
16. Identify the muscles that help stabilize the shoulder joint when completing lateral raises.
17. Identify the type of muscle fiber that composes several heads of the medial deltoid.
18. Identify the muscles involved in front arm raises.
19. Identify the most appropriate exercises for beginners.

20. Understand what modifications to make to protect the back when performing the bench press exercise.
21. Identify which chest exercises are appropriate for beginners.
22. Understand what variation to use with the push up exercise to focus the work on the upper pectorals and on the lower pectorals.
23. Understand the correct form to use to perform an incline press.
24. Understand the correct form to use to perform dumbbell flies.
25. Understand the function of the pectoralis minor.
26. Identify the muscle groups developed by dumbbell pullovers.
27. Know at what angle an incline bench should be set to perform incline dumbbell presses and incline flies.
28. Understand the correct form for performing a chin-up.
29. Identify the muscles worked by the lat pulldown exercise.
30. Understand how to perform a close-grip lat pulldown.
31. Understand how to perform a seated row and isolate the posterior deltoid and middle portion of the trapezius.
32. Understand how to safely perform a freestanding T-Bar row.
33. Understand how to correctly perform a bent row.
34. Identify which exercises are not appropriate for someone with low back problems.
35. Understand how to block when using heavy weight.
36. Identify which back exercise would be most appropriate for a beginner to use to build strength.
37. Identify the correct position for the back for performing squats and deadlifts.
38. Understand why people with rigid ankles or long femurs might use a block of wood under their heels when performing front squats.
39. Know how to perform power squats with good form.
40. Know how to position the feet when performing an angle leg press to focus the work on the adductors, the quadriceps and the gluteals and hamstrings.
41. Identify which leg exercises are safe for beginners.
42. Identify the muscles worked by the lying leg curls exercise.
43. Know which variation to use to emphasize the gastrocnemius when performing a standing leg curl.
44. Identify which exercise can be used to both strengthen and stretch the hamstring muscles.
45. Identify which muscles are included in the adductor group.
46. Identify which muscles are included in the triceps surae.
47. Identify the muscle worked when seated calf raises are performed.
48. Know the proper form for performing lunges.
49. Identify what limits the extension of the hip when performing hip extension exercises.
50. Know how to focus the work on the gluteals when performing floor hip extensions.
51. Identify the muscles worked by bridging.
52. Know how to increase the intensity of bridging.
53. Identify what limits the abduction of the hip when performing hip abduction exercises.

54. Understand what is meant by the terms coxa vara and coxa valga.
55. Understand how to put more emphasis on the gluteus maximus when using the seated hip abduction machine.
56. Know the proper form for performing floor hip abductions.
57. Know how to perform crunches and emphasize the obliques.
58. Know the proper form for performing sit-ups.
59. Identify which muscles are worked when performing incline bench sit-ups with a torso twist.
60. Know how to modify bench sit-ups to make them easier to perform.
61. Identify which muscles are worked as you perform incline leg raises.
62. Know how to involve the obliques when performing hanging leg raises.



CEC/CEU Test for “*Strength Training Anatomy*”

Choose the best answer.

Mark all your answers on the answer sheet.

1. Which arm exercise would you recommend to work the biceps in all its actions?
 - a. High pulley curls
 - b. Reverse curls
 - c. Concentration curls
 - d. Curls
2. When performing a concentrated curl, the elbow rests:
 - a. On top of your thigh
 - b. Against your rib cage
 - c. On the inner side of your thigh
 - d. On the outer side of your thigh
3. Which of the following exercises would you recommend to work the brachioradialis?
 - a. Barbell curl
 - b. Preacher curls
 - c. Reverse wrist curls
 - d. Hammer curls
4. When performing machine bicep curls:
 - a. Extend your arms completely and exhale as you curl the bar
 - b. Extend your arms completely and inhale as you curl the bar
 - c. Inhale as you complete the movement
 - d. None of the above
5. The biceps muscle _____ and _____ the arm.
 - a. Extends, supinates
 - b. Extends, pronates
 - c. Flexes, supinates
 - d. Flexes, pronates

6. When performing barbell curls which grip would you use to emphasize working the long head of the biceps?
 - a. Underhand narrow grip
 - b. Overhand narrow grip
 - c. Underhand wide grip
 - d. Overhand wide grip
7. Which of the following exercises would you recommend to strengthen the wrist joint?
 - a. Reverse curls
 - b. Barbell curls
 - c. Hammer curls
 - d. Preacher curls
8. Which of the following explains why the wrist is often a weak joint?
 - a. A muscle imbalance exists between the bicep and tricep muscles groups
 - b. The metacarpals are weak
 - c. A lack of strength in the wrist extensors
 - d. A lack of strength in the wrist flexors
9. A tricep exercise that is easy to perform and can be used by beginners is:
 - a. Tricep extensions
 - b. One-arm dumbbell tricep extensions
 - c. Tricep push downs
 - d. Tricep kickbacks
10. A tricep exercise that works the triceps, the anconeus and the wrist extensors is
 - a. Tricep extensions
 - b. Tricep kickbacks
 - c. Tricep dips
 - d. Tricep reverse pushdowns
11. Which exercise would you perform to equally work all three heads of the triceps?
 - a. Dumbbell tricep extensions
 - b. Tricep pushdowns
 - c. Tricep kickbacks
 - d. Either a or c
12. By performing a tricep pushdown with a rope instead of a bar:
 - a. The effort of the long head of the triceps will be felt more intensely
 - b. The effort of the lateral head of the triceps will be felt more intensely
 - c. The effort of the medial head of the triceps will be felt more intensely
 - d. The effort of the brachioradialis will be felt more intensely

13. Tricep dips from a bench works:
- The triceps, pectorals, and anterior deltoids
 - The triceps, pectorals and posterior deltoids
 - The triceps, trapezius and pectorals
 - The triceps, biceps and pectorals
14. By lowering the bar behind your head when performing supine tricep extensions, you focus on working the:
- Long and medial heads of the triceps
 - Medial head of the triceps
 - Medial and lateral heads of the triceps
 - Long head of the triceps
15. Which of the following exercises would you not recommend for someone who has had a rotator cuff injury?
- Lateral raises
 - Back press
 - Front raises
 - Upright rows
16. When performing a front press, placing your elbows slightly forward helps to emphasize the:
- Pectoralis major
 - Posterior deltoids
 - Medial deltoids
 - Anterior deltoids
17. Performing a dumbbell press while seated helps prevent:
- Hyperextension of the spine
 - Flexion of the spine
 - Stress on the rotator cuff muscles
 - Stress on the elbow joint
18. When performing lateral raises, the most effective way to train the medial deltoids is to:
- Raise the arms above the horizontal plane
 - Extend the arms to the front
 - Raise the arms to shoulder level keeping the elbows straight
 - Change starting positions by moving the arms to the side, behind the buttocks and in front of the thighs

19. The _____ holds the humerus in place in the shoulder joint and works with the deltoid to help raise the arm laterally.
- Supraspinatus
 - Subscapularis
 - Scalenus
 - Infraspinatus
20. Which of the following describes the correct form for performing bent-over lateral raises?
- Stand with your feet together and your knees slightly bent; bend forward at the waist and keep your back straight; hold the dumbbells with your elbows slightly bent
 - Stand with your feet spread apart and your knees slightly bent; bend forward at the waist and keep a slight arch in your back; hold the dumbbells with your elbows slightly bent
 - Stand with your feet spread apart and your knees slightly bent; bend forward at the waist and keep your back straight; hold the dumbbells with your elbows straight
 - Stand with your feet spread apart and your knees slightly bent; bend forward at the waist and keep your back straight; hold the dumbbells with your elbows slightly bent
21. The medial deltoid muscle is composed of _____ fibers which work synergistically with the _____ and _____ heads of the deltoid to bring the arm horizontal
- Pennate, medial, lateral
 - Pennate, anterior, posterior
 - Fusiform, medial, lateral
 - Fusiform, anterior, posterior
22. Every arm raise exercise involves the muscles that attach the _____ to the _____
- Humerus, scapulae
 - Scapulae, vertebrae
 - Scapulae, rib cage
 - Humerus, clavicle
23. When performing side-lying lateral raises, the emphasis is on the:
- Supraspinatus at the beginning of the movement
 - Infraspinatus at the beginning of the movement
 - Suspraspinatus at the end of the movement
 - Infraspinatus at the end of the movement

24. When performing a low pulley bent-over lateral raise, pinching the scapulae together at the end of the movement emphasizes the:
- Latissimus dorsi and trapezius
 - Latissimus dorsi and rhomboids
 - Infraspinatus and trapezius
 - Trapezius and rhomboids
25. Which of the following exercises would you recommend for a beginner to use to strengthen their medial deltoids?
- Low pulley lateral raises
 - Nautilus lateral raises
 - Front raises
 - Dumbbell press
26. When performing a barbell front raise you should:
- Inhale and raise the barbell forward with your arms bent until it reaches eye level
 - Inhale and raise the barbell forward with your arms straight until it reaches eye level
 - Exhale and raise the barbell forward with your arms bent until it reaches eye level
 - Exhale and raise the barbell forward with your arms straight until it reaches eye level
27. Shoulder exercises that involve front arm raises place secondary emphasis on the:
- Triceps
 - Biceps
 - Pectorals
 - Trapezius
28. Which of the following describes the correct starting position for performing an upright row?
- The feet should be slightly spread, the back should be straight, the hands should be close together in an overhand grip on the barbell
 - The feet should be close together, the back should be straight, the hands should be close together in an overhand grip on the barbell
 - The feet should be slightly spread, the back should be straight, the hands should be slightly more than shoulder width apart with an underhand grip on the barbell
 - The feet should be slightly spread, the back should be straight, the hands should be slightly more than shoulder width apart with an overhand grip on the barbell

29. What variation would you recommend when performing a bench press to help protect the back?
- Lower the bar to the upper chest only
 - Raise the feet from the floor by curling the legs over the abdominals
 - Arch the back when lifting heavier loads
 - Use a very wide grip on the bar
30. Which of the following chest exercises would you recommend for beginners to use to develop strength?
- Pec dec flys
 - Incline press
 - Dumbbell flys
 - Parallel bar dips
31. Performing a close-grip bench press is excellent for developing the pectorals and the:
- Serratus anterior
 - Biceps brachii
 - Rhomboids
 - Triceps brachii
32. Elevating the feet when performing a push up helps to isolate the work on the:
- Anterior deltoids
 - Serratus anterior
 - Biceps brachii
 - Upper pectorals
33. In order to focus on working the pectorals when performing a parallel bar dip you would:
- Straighten your torso
 - Hang a dumbbell between your feet
 - Bend your torso forward
 - Bend the elbows until the chest is below the bars

34. Which of the following describes the correct form for performing an incline press?
- a. Sit on an incline bench set at an angle between 45° and 60° , take an underhand grip on the bar with your hands more than shoulder-width apart, inhale and lower the bar to the upper chest, exhale and press the bar back up to straight arms
 - b. Sit on an incline bench set at an angle between 45° and 60° , take an overhand grip on the bar with your hands more than shoulder-width apart, inhale and lower the bar to the upper chest, exhale and press the bar back up to straight arms
 - c. Sit on an incline bench set at an angle between 45° and 75° , take an overhand grip on the bar with your hands more than shoulder-width apart, inhale and lower the bar to the upper chest, exhale and press the bar back up to straight arms
 - d. Sit on an incline bench set at an angle between 45° and 60° , take an underhand grip on the bar with your hands more than shoulder-width apart, exhale and lower the bar to the upper chest, inhale and press the bar back up to straight arms
35. All of the following are correct regarding the performance of dumbbell flys except:
- a. Hold the dumbbells with your arms extended and your elbows slightly bent
 - b. Lower the dumbbells until your elbows are at shoulder height
 - c. Work with heavy weight in order to maximize the stretch of the pectorals
 - d. Exhale while raising the dumbbells back up to the starting position
36. Incline dumbbell flys should be performed lying on an incline bench set at an angle between:
- a. 45 and 70 degrees
 - b. 45 and 60 degrees
 - c. 30 and 60 degrees
 - d. 30 and 70 degrees
37. When performing incline dumbbell presses the incline bench should be set at an angle less than 60° to:
- a. Avoid placing too much emphasis on the deltoids
 - b. Avoid placing stress on the lower back
 - c. Avoid placing too much emphasis on the rhomboids
 - d. Avoid placing too much stress on the biceps

38. Which of the following exercises would you perform to work the pectoralis major and the coracobrachialis?
- a. Bench press
 - b. Push ups
 - c. Pec deck flys
 - d. Both a and c
39. Crossing the arms when performing cable crossover flys emphasizes working the:
- a. Anterior deltoid
 - b. Clavicular head of the pectoralis major
 - c. Sternal head of the pectoralis major
 - d. Biceps brachii
40. The pectoralis minor, under the pectoralis major, functions to:
- a. Stabilize the scapulae
 - b. Protract the shoulder
 - c. Flex the humerus
 - d. Both a and b
41. Dumbbell pullovers develop the entire pectoral muscle and also works all of the following except:
- a. Rhomboids
 - b. Serratus anterior
 - c. Brachialis
 - d. Teres major
42. Which of the following exercises would you recommend to stretch the entire rib cage?
- a. Close-grip bench press
 - b. Barbell pullovers
 - c. Push-ups
 - d. Cable crossover flys
43. Which of the following describes the correct form for performing chin-ups?
- a. Hang from a fixed bar with a narrow, underhand grip; inhale and pull upward until your chest is up to the level of the bar; exhale and lower to the starting position
 - b. Hang from a fixed bar with a narrow, overhand grip; inhale and pull upward until your chest is up to the level of the bar; exhale and lower to the starting position
 - c. Hang from a fixed bar with a wide, overhand grip on; exhale and pull upward until your chest is above the level of the bar; inhale and lower to the starting position
 - d. Hang from a fixed bar with a wide, overhand grip; inhale and pull upward until your chest is up to the level of the bar; exhale and lower to the starting position

44. While performing a chin-up, sticking out your chest until your chin reaches the level of the bar and pulling your elbows to the rear, places primary emphasis on the:
- a. Teres major
 - b. Upper latissimus dorsi
 - c. Lower latissimus dorsi
 - d. Biceps
45. Which back exercise would you recommend to include in a program focused on training the arms?
- a. Reverse chin-ups
 - b. Stiff-legged dead lifts
 - c. Back extensions
 - d. Barbell shrugs
46. Lat pulldowns work all of the following muscles except:
- a. Trapezius
 - b. Rhomboids
 - c. Deltoids
 - d. Biceps
47. When you perform a close-grip lat pulldown and pinch your scapulae together, you work the:
- a. Trapezius and posterior deltoids
 - b. Anterior deltoids and trapezius
 - c. Pectorals and deltoids
 - d. Triceps and rhomboids
48. Which of the following exercises would you include in your exercise program to add power to your stroke for swimming?
- a. Cable crossover flies
 - b. Straight arm lat pulldowns
 - c. Bench press
 - d. T-bar rows
49. How would you perform a seated row in order to isolate the posterior deltoid and middle trapezius?
- a. Round your back in order to increase the range of motion as you pull the handle to your lower rib cage
 - b. Round your back in order to increase the range of motion as you pull the handle to your upper rib cage
 - c. Use a straight bar handle with an overhand grip
 - d. Use a straight bar handle with an underhand grip

50. When doing freestanding T-bar rows, you should _____ to avoid risk of injury.
- Keep your back slightly arched
 - Keep your back slightly rounded
 - Keep your back arched as you pull the weight to your chest and flat as you lower the weight
 - Keep your back straight throughout the movement
51. Which of the following best describes the correct form for performing a barbell row?
- Knees straight, torso bent at an angle of about 45° with a straight back, hands more than shoulder width apart with an overhand grip. Exhale and pull the bar straight up until it touches your chest, inhale as you return to starting position
 - Knees straight, torso bent at an angle of about 60° with a straight back, hands shoulder width apart with an overhand grip. Exhale and pull the bar straight up until it touches your chest, inhale as you return to starting position
 - Knees slightly flexed, torso bent at an angle of about 45° with a straight back, hands more than shoulder width apart with an overhand grip. Exhale and pull the bar straight up until it touches your chest, inhale as you return to starting position
 - Knees slightly flexed, torso bent at an angle of about 45° with straight back, hands more than shoulder width apart with an overhand grip. Inhale and pull the bar straight up until it touches your chest, exhale as you return to starting position
52. Which of the following exercises would you not recommend for someone with low back problems?
- One-arm dumbbell rows
 - Deadlifts
 - Straight-arm lat pull downs
 - Barbell shrugs
53. Whenever you are working with heavy weight you should “block” in order to:
- Avoid rounding the back
 - Avoid extending the spine
 - Pull back your shoulders
 - Bend forward with your upper torso
54. Which of the following exercises would you recommend for a beginner to use to build strength in their back?
- Seated rows
 - Freestanding T-bar rows
 - Back extensions
 - Torso extensions at a machine

55. When performing an upright row, by widening your grip you will place more emphasis on the:
- Trapezius
 - Deltoids
 - Rhomboids
 - Biceps
56. Which exercise would you recommend to focus on working the trapezius?
- T-Bar rows
 - Straight-arm lat pulldowns
 - Chin-ups
 - Barbell shrugs
57. Performing squat and deadlift exercises with the back not positioned correctly can frequently result in a:
- Herniated disk, usually in the lumbar region
 - Torn Achilles tendon
 - Fracture in the cervical vertebrae
 - Torn biceps femoris
58. When performing squats you should never:
- Bring your thighs into a position below the horizontal
 - Position the bar across your posterior deltoids
 - Round your back
 - Rest your heels on a block of wood
59. Placing the heels on a block of wood to while performing front squats may help people keep from:
- Placing too much stress on their Achilles tendon
 - Tilting their torso too much
 - Placing too much stress on their gastrocnemius muscle
 - Moving their hips too far back
60. Performing power squats with your legs widely spread and your toes pointed outward intensely works:
- The adductor longus, magnus and brevis, the pectineus and the gracilis
 - The pectineus, the vastus lateralis, the rectus femoris and the gluteus maximus
 - The vastus lateralis, the vastus medialis and the rectus femoris
 - The semimembranosus, the semitendinosus, the biceps femoris and the gracilis

61. When using an angle leg press machine with your feet close together and placed lower on the footplate, you are primarily emphasizing:
- The adductors
 - The abductors
 - The gluteals and hamstrings
 - The quadriceps
62. When performing hack squats if you move your feet forward you will shift the work to the:
- Biceps femoris
 - Gastrocnemius
 - Adductors
 - Gluteals
63. For beginners, which exercise would you recommend for strengthening the quadriceps?
- Hack squats
 - Dumbbell Squats
 - Machine leg extensions
 - Angled leg press
64. Lying leg curls involves which of the following muscles:
- Biceps femoris, semitendinosus, semimembranosus
 - Rectus femoris, vastus medialis, vastus lateralis
 - Vastus medialis, vastus lateralis, vastus intermedius
 - Gracilis, pectineus, adductor magnus
65. To increase the emphasis on the gastrocnemius when performing a standing leg curl you would:
- Lean your torso forward
 - Bend your ankle
 - Extend your foot
 - Plantarflex your foot
66. Which of the following exercises would you recommend to work the hamstring muscles?
- Hack squats
 - Squats
 - Seated leg curls
 - Standing calf raise

67. Which of the following exercises can be used to both stretch the hamstring muscles as well as strengthen them?
- a. Standing leg curls
 - b. Good mornings
 - c. Hack squats
 - d. Front squats
68. Seated calf raises place primary emphasis on the _____ muscle which functions to _____ the ankle
- a. Soleus, extend
 - b. Soleus, flex
 - c. Gastrocnemius, extend
 - d. Soleus, plantarflex
69. The _____ is referred to as the hip adductor group.
- a. Pectineus, adductor longus, adductor magnus and gastrocnemius
 - b. Adductor longus, adductor magnus, biceps femoris, and iliopsoas
 - c. Patella, adductor longus, adductor magnus and gracilis
 - d. Gracilis, pectineus, adductor longus, adductor magnus and adductor brevis
70. When performing standing calf raises to work the triceps surae, you are working:
- a. Gastrocnemius, lateral and medial heads, and the soleus
 - b. Peroneus longus, peroneus brevis and the soleus
 - c. Gastrocnemius medial head, soleus and the biceps femoris
 - d. Tibialis anterior, soleus and gastrocnemius
71. Performing seated calf raises works the _____ because bending the knees relaxes the _____.
- a. Gastrocnemius medial head; soleus
 - b. Soleus; gastrocnemius
 - c. Gastrocnemius lateral head; soleus
 - d. Peroneus longus; gastrocnemius

72. Which of the following describes the form to use when performing lunges?
- a. Stand with your feet close together, place a light barbell across your shoulders, inhale and take a big step forward keeping your torso upright; in the bottom position the top of your forward thigh is slightly below horizontal.
 - b. Stand with your feet slightly apart, place a light barbell across your shoulders, inhale and take a big step forward keeping your torso upright; in the bottom position, the top of your forward thigh is horizontal to the floor.
 - c. Stand with your feet slightly apart, place a light barbell across your shoulders, exhale and take a small step forward keeping your torso upright; in the bottom position the top of your forward thigh is horizontal to the floor.
 - d. Stand with your feet close together, place a heavy barbell across your shoulders, inhale and take a step forward as you lean your torso forward; in the bottom position the top of your forward thigh is slightly below horizontal.
73. Because of the balance required when performing lunges, beginners should:
- a. Start with very light weight
 - b. Take very small steps forward
 - c. Keep the top of their forward thigh above parallel
 - d. Touch the knee of the back leg to the floor in the bottom position
74. When performing cable kick- backs, the extension of the hip is limited by the stress placed on the _____.
- a. Biceps femoris, long head
 - b. Gluteus maximus
 - c. Iliofemoral ligament
 - d. Greater trochanter
75. To focus on working the gluteals when performing floor hip extensions you would:
- a. Dorsiflex your foot as you extend your hip completely
 - b. Keep your knee bent as you extend your hip completely
 - c. Swing your leg to a straightened position as you move your leg to the rear
 - d. Plantarflex your foot as you move you extend your hip completely
76. Bridging works the:
- a. Rectus abdominus
 - b. Tensor fasciae latae
 - c. Erector spinae
 - d. Hamstrings and gluteals

77. In order to increase the intensity of bridging you can:
- Place your heels on a board
 - Put your feet on a bench
 - Place your hands behind your head
 - Place weight on the hips
78. When performing cable hip abductions, the abduction of the hip is limited by the _____
- Whether the neck of the femur is horizontal or vertical and the shape of the rim of the acetabulum
 - The length of the femur
 - The lack of flexibility in the tensor fascia latae
 - The lack of strength in the gluteus maximus
79. When the neck of the femur is almost horizontal it is referred to as _____, and when it is almost vertical it is referred to as _____.
- Coxofemoral; os coxa
 - Coxa vara; coxa valga
 - Coxofemoral; coxa valga
 - Coxa valga; coxa vara
80. To put more emphasis on the gluteus maximus when using a seated hip abduction machine you should:
- Bend forward at the waist
 - Point your toes as you press your legs out
 - Press your upper body against the back of the seat
 - Work one leg at a time
81. Which of the following describes the best form for performing floor hip abductions?
- Lie on your side with your head supported with your hand; lift your top leg off the floor to an angle of 70° keeping your knee flexed; return to the starting position.
 - Lie on your side with your head and shoulders in line; lift your top leg off the floor to an angle of 90° keeping your knee extended; return to the starting position.
 - Lie on your side with your head and shoulders in line; lift your top leg off the floor to an angle of 90° keeping your knee flexed; return to the starting position.
 - Lie on your side with your head supported with your hand; lift your top leg off the floor to an angle of no more than 70° keeping your knee extended; return to the starting position.

82. When you perform crunches and twist alternately from side to side you are placing more emphasis on the _____
- Tensor fasciae latae
 - Rectus abdominus
 - Obliques
 - Iliopsoas
83. Which of the following describes the best form for performing sit-ups?
- Inhale and curl your torso off the floor; exhale as you complete the movement; return to starting resting your torso on the floor
 - Exhale and curl your torso by rounding your back; inhale as you complete the movement; return to starting resting your torso on the floor
 - Inhale and curl your torso by rounding your back; exhale as you complete the movement; return to starting without resting your torso on the floor
 - Exhale and curl your torso off the floor; inhale as you complete the movement; return to starting without resting your torso on the floor
84. Hooking your feet lower when performing gym ladder sit-ups allows for a greater range of motion and more involvement of the _____
- Hip flexors
 - Pectineus
 - Vastus lateralis
 - Gracilis
85. When performing an incline bench sit-up, twisting your torso left will more intensely involve:
- The right external oblique, left internal oblique and right rectus abdominus
 - The left external oblique, left internal oblique and right rectus abdominus
 - The right external oblique, right internal oblique and right rectus abdominus
 - The right external oblique, left internal oblique and left rectus abdominus
86. In order to make the movement easier when performing suspended bench sit-ups you would:
- Place your arms over your head
 - Cross your arms over your chest
 - Extend one arm forward, place one hand behind your head
 - Extend both arms forward
87. Which of the following abdominal exercises would you recommend for a beginner?
- Suspended bench sit-ups
 - Incline bench sit-ups
 - Leg raises
 - Machine crunches with light weight

88. When performing an incline leg raise, as you raise your legs you are working the

- a. Iliopsoas, tensor fasciae latae and biceps femoris
- b. Rectus femoris, rectus abdominus and iliopsoas
- c. Iliopsoas, rectus femoris and tensor fasciae latae
- d. Tensor fasciae latae, rectus abdominus and obliques

89. In order to increase the difficulty of leg raises you would:

- a. Limit the range of motion and pull your knees only half way to your chest
- b. Perform the movement with your legs straight
- c. Press your spine flat against the back pad as you pull your knees to your chest
- d. Flex your feet as you pull your knees to your chest

90. In order to have more involvement of the obliques when performing hanging leg raises you would:

- a. Perform the movement with straight legs.
- b. Limit the range of motion without lowering your knees below the horizontal plane.
- c. As you raise your knees, twist to each side on successive reps.
- d. Raise your knees as high as possible to your chest and keep your torso lengthened.