Exercises for the Traps (Trapezius)

**Shoulder Shrugs**

*Major Muscle Group: Trapezius*

Grasp the bar with shoulder-width or slightly wider overhand grip. Stand straight. Elevate shoulders as high as possible. Lower and repeat.
**Lower Pulley Row to Neck**

*Major Muscle Group: Trapezius*

*Other Muscles Worked: Biceps, Middle back, Shoulders*

Sit at a seated row station and grab the ends of the rope using a palm-down grip. Sit with your knees slightly bent and your back straight. Do not lean back — your back should be almost completely vertical. Pull the rope back and up to neck height. Your elbows should be out, away from your sides. Return slowly to the starting position.

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**Dumbbell Incline Shoulder Raise**

*Major Muscle Group: Trapezius*

Sit down on an incline bench with the dumbbells resting on your lower thigh. Kick the weights to your shoulders and lean back. Position the dumbbells above your shoulders with your elbows extended. Raise your shoulders toward the dumbbells as high as possible. Lower shoulders to bench and repeat.
**Upright Row**

*Major Muscle Group: Trapezius*
*Other Muscle Worked: Biceps, Shoulders*

Standing upright, grasp a barbell with your hands about shoulder-width apart. Let the bar hang straight down in front of you. Keep your body and wrists straight. Pull the bar straight up toward your chin, keeping it close to your body. Lower slowly to the starting position. Keep your back straight, making sure not to swing.
### Exercises for the Shoulders (Deltoids)

#### Barbell Incline Shoulder Raise

*Major Muscle Group: Deltoids*

Lie horizontal on an incline bench. Lift barbell from rack with a shoulder-width overhand grip. Position barbell over the upper chest with elbows extended. Raise your shoulders toward the bar as high as possible. Lower shoulders to bench and repeat.

![Barbell Incline Shoulder Raise](image1)

#### Barbell Rear Delt Row

*Major Muscle Group: Deltoids*

*Other Muscle Worked: Biceps, Lats*

Bend knees slightly and bend over bar while keeping your back straight. Grasp the bar with a wide overhand grip. Keeping upper arm perpendicular to torso, pull barbell up toward neck until upper arms are just beyond parallel to floor. Return and repeat.

![Barbell Rear Delt Row](image2)
**Bent-Over Dumbbell Rear Delt Raise**

*Major Muscle Group: Deltoids*

Bend over with your back as close to parallel with the floor. Hold dumbbells with your arms straight down and your elbows locked. Raise the dumbbells out to shoulder height, even with your ears. Do NOT swing the dumbbells up.

**Dumbbell Side Lateral Raises**

*Major Muscle Group: Deltoids — Medial (side) deltoids
Other Muscles Worked: Front deltoids, Forearms*

Stand with your feet shoulder-width apart. Hold the dumbbells just in front of your body, with the palms of your hands facing each other. Keep a slight bend in your elbows. Raise the dumbbells out to the sides and upward in a semicircular arc until they are just above shoulder level. Lower the dumbbells back to the starting position. Repeat.
Bent-Over Low-Pulley Side Lateral

Major Muscle Group: Deltoids
Other Muscles Worked: Traps

Hold the handle with your left hand. Bend until back is nearly parallel to the floor. Your legs should be slightly bent, with your right hand on your lower right thigh. Raise your left arm, elbow locked, until parallel to the floor, in line with your left ear. Lower back to the starting position. Repeat.
Exercises for the Chest (Pectoralis)

Around the World
*Major Muscle Group: Pectoralis*
Grab two dumbbells and lie on a bench. Now put the dumbbells face up toward the ceiling on your upper thighs while keeping your elbows slightly bent. Now move the barbells, not up, but around as if you are drawing an angel in the snow. Bring them behind your head so that they touch each other and return to the original position. Repeat.

Barbell Bench Press — Medium Grip
*Major Muscle Group: Pectoralis*
*Other Muscles Worked: Triceps, Shoulders*
Lie on a flat bench with your feet flat on the floor a little more than shoulder-width apart (or have your knees bent and on the weight bench). Keep your back flat on the bench! Using a grip broader than shoulder-width, hold the barbell above your body, and then lower slowly to the middle of your chest. Without bouncing the weight off your chest, drive the barbell up over the middle of your chest until your arms are straight and your elbows are almost locked. Lower the bar down slowly.
**Bent-Arm Barbell Pullover**

*Major Muscle Group: Pectoralis*
*Other Muscles Worked: Triceps, Shoulders, Lats*

Lie on a bench, head over the end, with your feet flat on the floor. Hold a bar or dumbbells with hands about 35 cm (14 in) apart. Keep elbows in at all times! In a semicircular motion, lower the bar to the floor slowly and as far as comfortable. Pull bar back up using the same path. Keep your head down and do not raise your hips.

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**Butterfly or Pec Deck Fly**

*Major Muscle Group: Pectoralis*

Sit at the machine with your back flat on the pad. Place your forearms on padded lever. Position your upper arms approximately parallel to the ground. Push levers together slowly and squeeze your chest in the middle. Return until chest muscles are stretched fully. Repeat.
**Cable Crossover**

*Major Muscle Group: Pectoralis*

*Other Muscles Worked: Shoulder*

Stand about 30 cm (12 in) in front of the weight stacks with a handle (attached to a high pulley) in both hands. Lean slightly forward and put one foot in front of the other (for balance). Your front knee should be slightly bent. Throughout the movement, your hands around and in front of your body in a hugging motion, pulling downward with your elbows slightly bent. When your hands meet directly in front of your midsection, squeeze the muscles and then slowly return to the starting position.

**Dumbbell Flies**

*Major Muscle Group: Pectoralis*

*Other Muscles Worked: Shoulder*

Using a bench, hold dumbbells together at arm's length above your shoulders, palms facing each other. Keep arms as straight as possible with a slight bend in the elbow. Lower dumbbells out to each side of your chest in a semicircular motion. Return to chest using the same path. Keep head and back firmly on the bench and your feet on the floor. Can be done on a decline bench.
**Exercises for the Lats (Latissimus Dorsi)**

**Close-Grip Front Lat Pulldown**

*Major Muscle Group: Latissimus Dorsi*

*Other Muscles Worked: Biceps, Middle back*

Sit at a lats pulldown machine or kneel in front of a cable pulley. Hold lat bar with hands about 20–25 cm (8-10 in) apart. Start with arms extended overhead. Pull bar straight down until it is even with your upper chest. Return slowly to starting position. Do not lean back!
**Cable Rows**

*Major Muscle Group: Latissimus dorsi*
*Other Muscles Worked: Middle back*

Sit at a seated cable row station with your back erect, feet planted firmly against the pads, and your knees only slightly bent. Pull cable attachment to waist while straightening lower back. Pull shoulders back and push chest forward during contraction. Return until arms are extended, your shoulders are stretched forward, and lower back is flexed forward. Repeat.

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**Pull-Ups**

*Major Muscle Group: Latissimus Dorsi*

Step up and grasp bar with a wide overhand grip. Pull body up until neck reaches the height of the hands. Lower body until arms and shoulders are fully extended. Repeat.
**Straight-Arm Pulldown**

*Major Muscle Group: Latissimus dorsi*

Stand in front of a lat pulldown bar with your arms outstretched toward the bar. Place your palms flat on the bar and pull it down to shoulder level. Keeping your elbows slightly bent and your wrists locked, pull the bar down toward your body in an arcing motion. The bar should touch or come close to your thighs. Slowly allow the bar to come back up to the starting position. Keep your back straight. Repeat.
**Exercises for the Triceps (Triceps Brachii)**

**Bench Dips**  
*Major Muscle Group: Triceps brachii*  
*Other Muscles Worked: Chest, Core*  
Place two flat benches parallel to each other, about 100–120 cm (36–48 in) apart. With your hands grasping the side of the bench behind you, cross one foot over the other on the other bench. Slowly lower your body toward the floor by bending your elbows until your upper arms and forearms form a right angle. Slowly raise back up to the start position by straightening your arms. Repeat.

**Cable Lying Triceps Extension**  
*Major Muscle Group: Triceps brachii*  
Lie on a bench and grasp a short bar with a narrow overhand grip. With your arms extended, position the bar over your forehead. Lower the bar by bending the elbow. Go down to your forehead. Do not move your elbows! They should stay in the same place at all times. Extend the arm back to the starting position. Repeat.
**Cable Tricep Extension**

*Major Muscle Group: Triceps brachii*

Grasp the bar with a closed, pronated grip that is about 10–15 cm (4–6 in) apart. Feet should be shoulder-width apart, with knees slightly bent and torso erect. Arms should be bent at the elbows. Pull the bar down slowly toward the lower trunk of the body without forcefully extending the elbows. Allow the bar to rise slowly under control until you are at start position. Repeat.
**Exercises for the Biceps (Biceps Brachii)**

**Chin-Up**

*Major Muscle Group: Biceps brachii*

*Other Muscles Worked: Forearms, Lats*

Hold the chin-up bar with your palms facing you with your hands 15–20 (6–8 in) apart. Pull yourself up and put your chin over the bar. Return slowly to the starting position fully extended. Do NOT swing back and forth. Repeat.
Concentration Curls

Major Muscle Group: Biceps brachii

Sit on a flat bench with your elbow resting on the inside of the thigh. Rest your other hand on the top of your other thigh for support. Slowly curl the weight up while keeping the torso, upper arm, and elbow still. As you lift, twist your wrist so that your little finger turns toward your body. Squeeze the muscle at the top and then slowly lower the weight. Repeat.
**Dumbbell Bicep Curls**

Major Muscle Group: *Biceps brachii*

Stand straight up, with your head up and your legs straight. Start with the dumbbells at arm’s length with your palms facing in. Curl dumbbells up at the same time, twisting your wrists on the way up, keeping your elbows into your side. Your palms should be facing up when you are at the end of the movement. Do NOT swing, and keep your back straight.
**Barbell Curl**

*Major Muscle Group: Biceps brachii*

Grip the barbell with an underhand grip shoulder-width apart. Stand straight up with your shoulders squared and with your feet shoulder-width apart. Let the bar hang down at arm's length in front of you, with your arms, shoulders, and hands in a straight line. Curl the bar up toward your chest in an arc keeping your back straight. Keep your elbows close to your sides. Bring the weight up to your chest without swinging the weight. Lower the weight slowly, resisting all the way down until your arms are nearly straight. Repeat.
Exercises for the Abs (Rectus Abdominis)

Ab Crunch Machine
Major Muscle Group: Rectus abdominus
This is like a sit-up or crunch, but the machine helps you to add resistance for greater strength increases. Place your forearms around the armrest, with your back firmly against the padding. You should have the chair set high enough that your legs dangle straight down when you are in position. Place your feet either flat on the footrest or loop them behind the footrest. Then slowly bring your chest toward your knees, keeping your back straight, and hold for a few seconds before extending them to the beginning position.

Air Bike
Major Muscle Group: Rectus abdominus
Lie on your back and put your hands behind your head. Raise your legs so your thighs are perpendicular and your lower legs are just above parallel to the floor. Curl up and bring your left elbow toward your right side while drawing your right knee in to meet it. Alternate sides, continuing the motion back and forth. Rotate your shoulder across and squeeze your abs.
**Bent-Knee Hip Raise**  
*Major Muscle Group: Rectus abdominus*  
This is like a reverse crunch but with a longer range of motion. Outstretch your hands to your sides with your knees bent at a 60° angle and your feet just off the floor. Using your lower abs, roll your pelvis backward to raise your hips off of the floor, bringing your knees over your chest. Squeeze your abs and then return to the starting position slowly. Repeat.

**Leg Raises**  
*Major Muscle Group: Rectus abdominus*  
Position yourself on the leg raise station. Support your body weight on your forearms. Keep your torso upright. Raise your legs in a semicircular arc until your legs are parallel to the floor. Then slowly lower legs back to the starting position. Repeat.
**Cable Crunch**  
*Major Muscle Group: Rectus abdominus*  
Kneel below a high pulley. Grasp cable rope attachment and place wrists against the head. Flex hips slightly and allow the weight to hyperextend the lower back. With the hips stationary, flex the waist so the elbows travel toward the middle of the thighs. Return and repeat.

**Cross-Body Crunch**  
*Major Muscle Group: Rectus Abdominus*  
Lie on your back and bend your knees about 60° and keep your feet flat on the floor. Place your hands loosely behind your head. Curl up and bring your right elbow and shoulder across your body while bringing your left knee in toward your left shoulder at the same time. Reach with your elbow and try to touch your knee. Try to bring your shoulder up toward your knee rather than just your elbow. Repeat side to side.
**Crunch — Legs on Exercise Ball**  
*Maj or Muscle Group: Rectus abdominus*  
Lie flat on your back with your feet resting on an exercise ball, with your knees bent at a 90° angle. Place your feet 8–10 cm (3–4 in) apart and point your toes inward so that they touch. Place your hands across your chest. Push the small of your back down in the floor to isolate your ab muscles. Begin to roll your shoulders off the floor. Your shoulders should come up off the floor only about 10 cm (4 in), and your lower back should remain on the floor. Return to lying flat on the floor. Repeat.

**Incline Reverse Crunch**  
*Maj or Muscle Group: Rectus abdominus*  
Lie on your back on an incline bench and hold on to the top of the bench with both hands. Hold your legs parallel to the floor using your abs to hold them there. Keep your knees and feet together. Slowly bend your knees and bring your pelvis up and in toward your chest. Slowly lower your pelvis to the starting position, keeping constant tension on the abs. Don’t arch your back inward while your legs are in the starting position. Repeat.
Abdominal Ball Crunch

Major Muscle Group: Rectus abdominus

Sit on top of an exercise ball with your feet placed firmly on the floor. Roll the bottom half of your glutes off the ball by sliding forward. Your lower back should be centred on top of the ball. Place your hands on the sides of your head, but do not use your hands to pull. Crunch your upper body forward and roll your shoulders toward your hips. Then lower back to the starting position and repeat.
Exercises for the Middle Back (Rhomboids)
(Important for strengthening the back — see chapter 12)

Bent-Over Barbell Row

Major Muscle Group: Rhomboids (middle back)
Other Muscles Worked: Biceps, Lats

Position your feet shoulder-width apart. Bend over so your back is parallel to the floor and hold bar with an overhand grip a little wider than shoulder width. Keep legs slightly bent. Hold bar at arm’s length straight down. Pull bar straight up to the lower part of your chest. Slowly lower bar back to starting position. Keep your head up and back straight at all times. Do NOT swing or use momentum to lift the weight. Repeat.
**Bent-Over Two-Dumbbell Row**

*Major Muscle Group: Rhomboids (middle back)*
*Other Muscles Worked: Biceps, Lats*

Put your feet close together and grab two dumbbells. Bend forward as far as you can go, so your torso is close to parallel to the floor. Bend your knees slightly and keep your head up and back arched inward. Hold dumbbells at arm's length straight down. Pull dumbbells straight up to your sides keeping your elbows out. Concentrate on squeezing with your middle back. Return slowly to starting position. Repeat.

**Bent-Over Row with Dumbbell**

*Major Muscle Group: Rhomboids (middle back)*

Start with one knee resting on the weight bench. Lean forward, supporting yourself with your hand. Hold the weight in your other hand with your arm hanging straight down. Pull the weight up until your upper arm is parallel to the weight bench. Return to the starting position. Repeat.
<table>
<thead>
<tr>
<th><strong>Incline Bench Pull</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Major Muscle Group: Rhomboids (middle back)</em></td>
</tr>
<tr>
<td>Lie face down on a bench and place a weighted barbell at the level of your head. Grab the barbell and pull it up as if you are doing a reverse bench press. Remember to look up and keep your back flexed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Lying T-Bar Row</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Major Muscle Group: Rhomboids (middle back)</em></td>
</tr>
<tr>
<td><em>Other Muscles Worked: Biceps, Lats</em></td>
</tr>
<tr>
<td>Adjust the leg height so that your upper chest is at the top of the pad. Lay face down on the pad and grab the handles with palms up. Extend your arms completely to start. Slowly pull the weight up and squeeze your back at the top of the movement. Do not lift your body off of the pad. Return to the starting position. Repeat.</td>
</tr>
</tbody>
</table>
Exercises for the Lower Back (Erector Spinae)
(Important for strengthening the back — see chapter 12)

Hyperextensions (Back Extensions)

Major Muscle Group: Erector spinae (lower back)
Other Muscles Worked: Hamstrings, Glutes, Upper back

Lie face down on a hyperextension bench and tuck your ankles securely under the footpads. You should have enough room to bend at the waist without any restriction. Start with your body in a straight line and your arms crossed in front. Slowly bend forward at the waist as far as you can while keeping your back flat. Do not round your back. Slowly raise your torso until your legs and upper body are in a straight line again. Do NOT arch your back past a straight line. Repeat.
**Superman**

*Major Muscle Group: Erector spinae (lower back) Other Muscles Worked: Glutes, Obliques, Rectus abdominus*

Lie face down on the floor with your arms stretched out directly overhead. Raise your arms, chest, and legs off the floor and hold for 2 seconds and squeeze. Lower back to the ground and repeat. You can also do these one arm and leg at a time as follows: Raise your left arm and right leg into the air at the same time, also raising your chest slightly off the floor. Hold there for a second and squeeze the muscles of your lower back. Lower your limbs back to the ground, and then raise your right arm and left leg and hold for a second. Repeat.

**Knee Tucks**

*Major Muscle Group: Erector spinae (lower back) Other Muscles Worked: Glutes, Obliques, Rectus abdominus*

Start in a plank position on the ball, with the ball under the shin/ankles. Roll the ball toward you with your feet, tightening the abs in the crunch. As you push the ball out, focus on tightening the lower-back muscles as you straighten the back. Repeat.
**Exercises for the Quads (Quadriceps)**

**Barbell Full Squat**

*Major Muscle Group: Quadriceps  
Other Muscles Worked: Hamstrings, Calves, Glutes*

Position a barbell on the back of the shoulders and grasp bar to the sides. Put your feet at shoulder-width, with your toes and knees slightly pointed outward. Descend until knees and hips are bent to 90° with your knees over your heels. Return and repeat. Can also be done with dumbbells in your hands instead or on the Smith machine.
Barbell Deadlift

Major Muscle Group: Quadriceps
Other Muscles Worked: Hamstrings, Calves, Glutes

Assume a stance about as wide as your own shoulders with feet straight forward or turned out no more than 25°. Grip the bar so that the inner aspects of your arms are slightly outside of your thighs. Most of the weight will be on the heels of the feet. Place your hands palms facing you. Your head should look slightly upward, hips down, the entire spine neutral, and feet flat. As you stand up with the weight, your hips and shoulders should come up together; if the hips rise before the shoulders, it means you’re using your back rather than your legs. Return the bar to the floor, under control, by reversing the technique you used to lift the weight.
**Cable Hip Adduction**

*Major Muscle Group: Quadriceps*

Stand in front of low pulley facing to one side. Attach the cable cuff to the ankle closest to the machine. Step out away from the stack with a wide stance and grasp the bar. Stand on your far foot and allow near leg to be pulled toward low pulley. Move the near leg just in front of far leg by abducting your hip. Return and repeat.
Dumbbell Rear Lunge

Major Muscle Group: Quadriceps
Other Muscles Worked: Calves, Glutes

Stand with dumbbells grasped to sides. Keeping your torso upright, extend one leg back on forefoot. Lower body on other leg by flexing knee and hip of front leg until knee of rear leg is almost in contact with floor. Keep the front knee over the heel of the front foot. Return to original standing position by extending the hip and knee of the forward leg. Repeat by alternating lunge with opposite leg.
Knee Extension

Major Muscle Group: Quadriceps

Sit on the leg extension machine (adjust the seat according to your body). Hook your feet beneath the roller pads and grasp the handles at the sides of the machine for support. Straighten your legs and lift the weight up. Pause at the top for a second or two to enhance the peak contraction in the quads, and then lower the weight slowly to the starting position.
**Leg Press**

*Major Muscle Group: Quadriceps*  
*Other Muscles Worked: Hamstrings, Gluteus maximus*

Adjust the seat of the machine so that your legs are comfortably bent. Place your feet on the platform, slightly greater than shoulder-width apart. Pushing through your heels, slowly straighten your knees. Don't arch your back. Return to the starting position. Repeat.
**Exercises for the Glutes (Gluteus Maximus and Gluteus Medius)**

**Bridge**

*Major Muscle Group: Gluteus maximus, Gluteus medius*

Lying on your back with your knees bent, lift your hips off the floor while keeping your back straight. Remember to keep your glutes tight!

**One Legged Cable Kickback**

*Major Muscle Group: Gluteus maximus, Gluteus medius*

*Other Muscles Worked: Hamstrings*

Hook a leather ankle cuff to a low cable pulley and then attach the cuff to your ankle. Face the weight stack from a distance of about 60 cm (24 in), grasping the steel frame for support. While keeping your knees and hips bent slightly and your abs tight, contract your glutes to slowly “kick” the working leg back in a semicircular arc as high as it will comfortably go. Bring your working leg forward, resisting the pull of the cable until you reach the starting position. Repeat and then switch legs.
**Stiff-Legged Barbell Deadlift — Hamstring**
*Major Muscle Group: Gluteus maximus, Gluteus medius*
*Other Muscles Worked: Hamstring*

Bend at your waist with your head up, back straight and knees nearly locked. Hold bar with hands about 40 cm (16 in) apart. Straighten up while holding the bar at arm’s length. Lower back down to the floor but do not let plates touch. Caution: this can be a dangerous exercise if not done correctly or if done with weights that are too heavy.

**Glutes Kickback**
*Major Muscle Group: Gluteus maximus, Gluteus medius*
*Other Muscles Worked: Hamstrings*

While on the floor on all fours, extend one leg and with the foot cocked to a point that places it in line with the head. Then raise it to a 45° angle with the foot elevated above the head. The key to maximum results is to concentrate on contracting the glutes throughout the full range of motion.
**Lying Leg Curls**

*Major Muscle Group: Hamstrings*
*Other Muscles Worked: Glutes*

Lie face down on the weight bench. Position the pad just above your ankles. Keep your upper body stable, but relaxed. Use the handgrip for support only. Slowly bend your knees, pulling your feet toward your buttocks. Only go as far as you can without moving your pelvis or spine. Do not pull with your arms, or arch your neck or lower back. Return to the starting position. Repeat.
Seated Leg Curl
Major Muscle Group: Hamstrings
Sit on the seat with your back against the padded back support. Place the back of your lower legs on top of the padded lever. Place the lap pad against the thigh just above the knees. Flex your knees to bring the lever down until your shin is perpendicular to the floor. Slowly release the lever until the knees return to a straight position. Repeat.

Stability Ball Leg Curl
Major Muscle Group: Hamstrings
Other Muscles Worked: Glutes, Core
In a supine position on the floor, put the stability ball under your legs between your knees and feet. Raise your hips in the air as you push down on the exercise ball. Pull the ball toward your glutes keeping your hips off the floor. Bring it in as far as possible and then straighten your legs, keeping your hips off the floor. Repeat.
**Exercises for the Forearms (Brachioradialis)**
(Important for baton and firearm training)

**Wrist Curl**

*Major Muscle Group: Forearm (brachioradialis)*

Sit and grasp the barbells with a narrow to shoulder-width underhand grip. Rest forearms on thighs with wrists just beyond knees. Allow the barbells to roll out of the palms down to the fingers. Grip the barbells back up and flex wrists. Lower and repeat.

**Dumbbell Lying Supination**

*Major Muscle Group: Forearm (brachioradialis)*

Grasp a dumbbell with weight placed on side. Lie on the floor or a bench on your side with your elbow bent in on your side at a 90° angle and the weight in your hands. Keep bent elbow tucked under body. Position thumb up (pronated). Rotate dumbbell so thumb turns downward (supinated). Return and repeat.
**Palms-Down Dumbbell Wrist Curl over a Bench**  
*Major Muscle Group: Forearm (brachioradialis)*  
Place two dumbbells beside a flat bench and then kneel on the opposite side of the bench. Hold dumbbells with your palms down. Place forearms flat on the bench with the back of your wrists on the edge of the bench. Lower dumbbells as far as possible, keeping a tight grip. Curl dumbbells up as high as possible. Do not let your forearms move. Return to original position.

**Wrist Roller**  
*Major Muscle Group: Forearm (brachioradialis)*  
Hold a wrist roller device straight in front of you, with your arms completely straight and parallel to the floor. Rotate one wrist at a time in order to roll the rope around the roller. Go until the weight is all the way up to the top. Return the weight to the starting position and start again. Don’t move your arms from the starting position. Repeat.