

# Exercises & Activities

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FOR THE TOTAL KNEE REPLACEMENT PATIENT









# Speed Your Recovery

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After your knee surgery, you will need to perform exercises to strengthen the muscles that affect the replacement joint.

The exercises may be uncomfortable, but they are needed to speed your recovery. If you think the pain is more than usual, stop the exercise and talk to your therapist or your doctor's nurse. A different exercise may be suggested.

Your physical therapist will identify which exercises to start with, how long to perform the exercise, and when to add new exercises to your routine. Always follow your doctor's orders on how much weight you can put on your operated leg.

**IMPORTANT NOTE:** Follow the exercises carefully, including the specific details from your surgeon. Your physical therapist will show you how to do these exercises.







# Contents

## INPATIENT & HOME EXERCISES

4

- Ankle Pumps
- Quad Sets
- Heel Slides
- Straight Leg Raises
- Knee Extension/Straightening
- Seated Knee Flexion
- Standing Hip Abduction
- Standing Marching
- Standing Knee Flexion

## OUTPATIENT EXERCISES

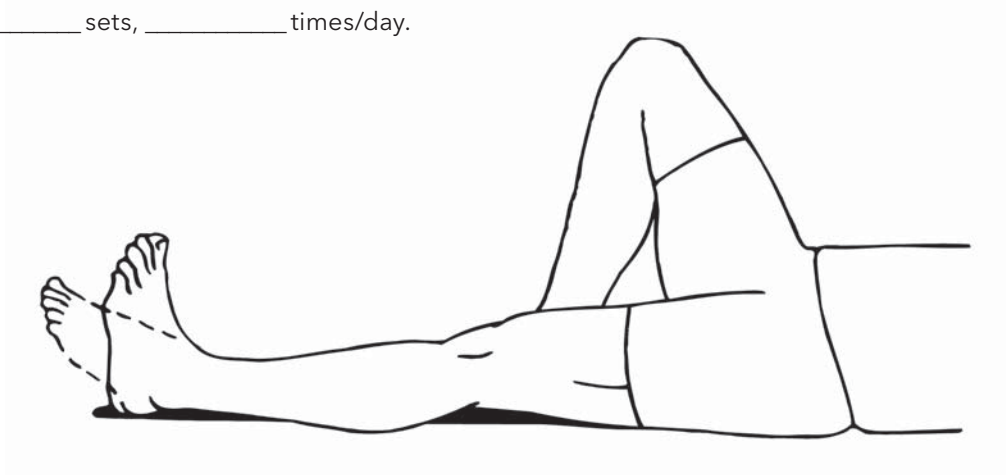
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- Terminal Knee Extension
- Hip Flex
- Hip Extension
- Heel Raises/Toe Raises
- Calf (Gastroc) Stretch
- Squats
- Wall Slides
- Bridging
- Knee Flex while Lying on Your Stomach
- Side-Lying Bottom Leg Raise (Hip Adduction)
- Isometric Hip Adduction
- Side-Lying Top Leg Raises (Hip Abduction)
- Straight Leg Raises with Weights
- Knee Cap Self Mobilization (Downward Knee Cap Push)
- Knee Cap Self Mobilization (Upward Knee Cap Pull)
- Cycling
- Knee Flexion (Hook-Lying)
- Knee Flexion
- Passive Extension
- Closed Chain #1
- Closed Chain #2
- Closed Chain #3
- Walking

ANKLE PUMPS

\_\_\_\_\_ (start date)

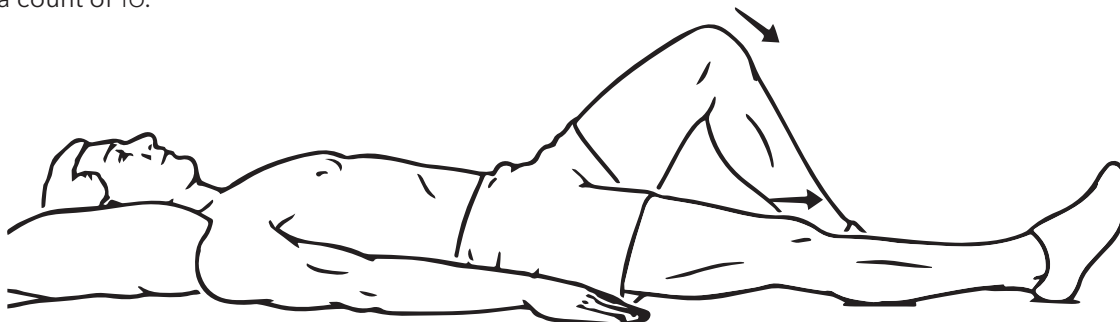
1. Repeat \_\_\_\_\_ times.
2. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



QUAD SETS

\_\_\_\_\_ (start date)

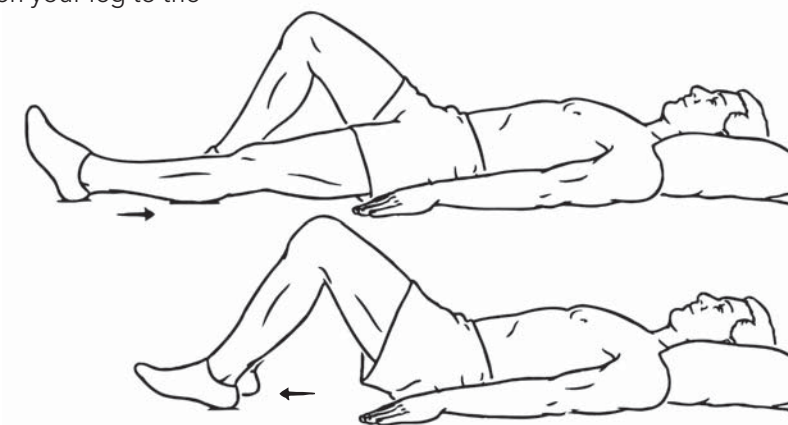
1. Lie on your back with your non-operated knee bent to take stress off your back.
2. On your operated leg, make sure your toes are facing up toward the ceiling.
3. Tighten the muscle above your knee on your operated leg by pushing your knee into the bed.
4. Hold for a count of five, gradually increasing to a count of 10.
5. Repeat \_\_\_\_\_ times.
6. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



## □ HEEL SLIDES

\_\_\_\_\_ (start date)

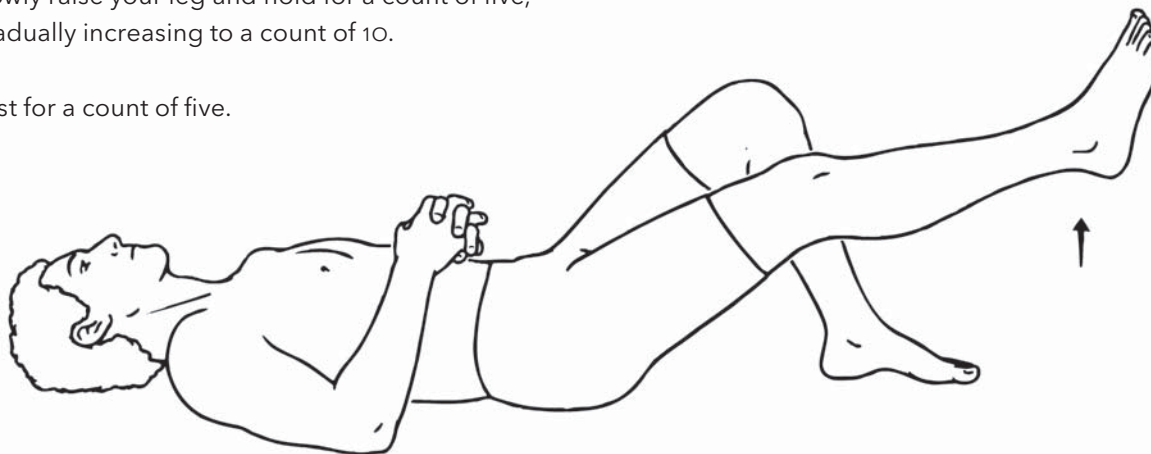
1. Lie on your back and bend your non-operated leg slightly. Your operated leg remains straight.
2. Keep toes facing up toward the ceiling.
3. Slowly slide the heel of the operated leg toward your buttocks, then slowly straighten your leg to the original position.
4. Repeat \_\_\_\_\_ times.
5. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



## □ STRAIGHT LEG RAISES

\_\_\_\_\_ (start date)

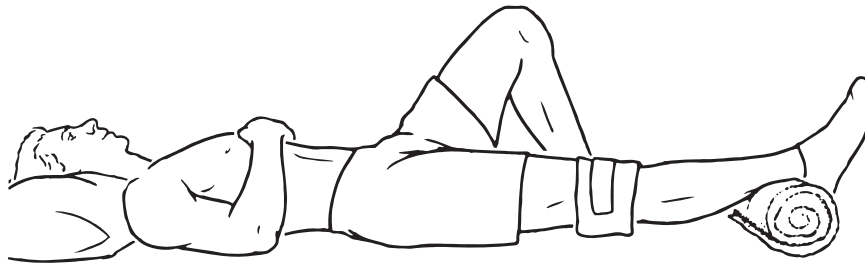
1. Lie on your back with your non-operated knee bent so there is less stress on your back.
2. Tighten the muscles above your knee on your operated leg.
3. Slowly raise your leg and hold for a count of five, gradually increasing to a count of 10.
4. Rest for a count of five.
5. Repeat \_\_\_\_\_ times.
6. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.
7. Work to straighten the knee completely, as it is weak following surgery.



KNEE EXTENSION/STRAIGHTENING

\_\_\_\_\_ (start date)

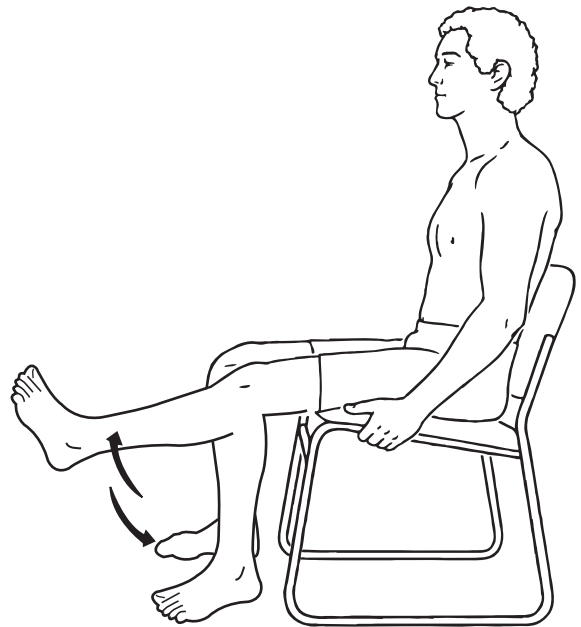
1. Lie on your back, or sit with your legs straight out in front of you.
2. Put a towel roll or foam roll under your foot and ankle, but not under your knee.
3. Allow your knee to straighten.
4. Do this 6 times a day for 5 minutes each time.



SEATED KNEE FLEXION

\_\_\_\_\_ (start date)

1. Sit in a chair that allows your feet to swing easily. Position your buttocks and lower back against the back of the chair.
2. Slowly relax your thigh muscles to allow more bend in your operated knee.
3. Try to pull the foot of your operated leg under the chair to increase the bend in the knee. You can assist by pushing on the front of the operated lower leg with the opposite foot.
4. Repeat \_\_\_\_\_ times.
5. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.

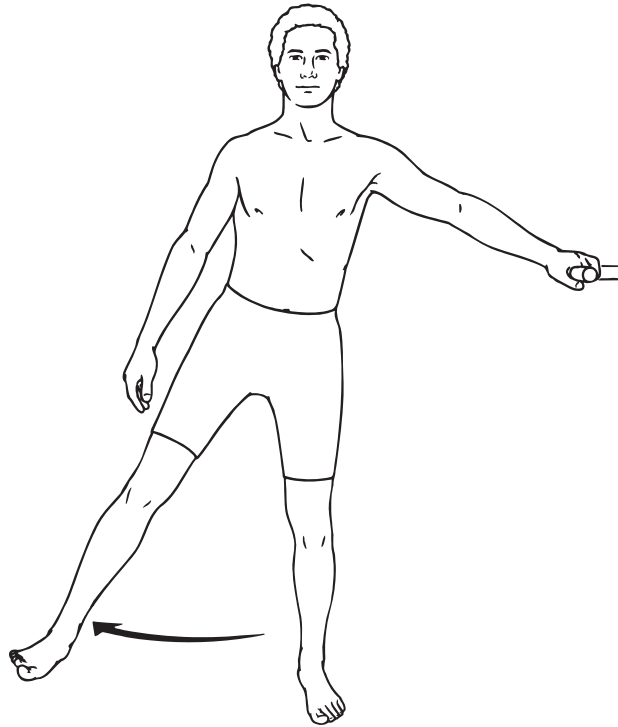




## □ STANDING HIP ABDUCTION

\_\_\_\_\_ (start date)

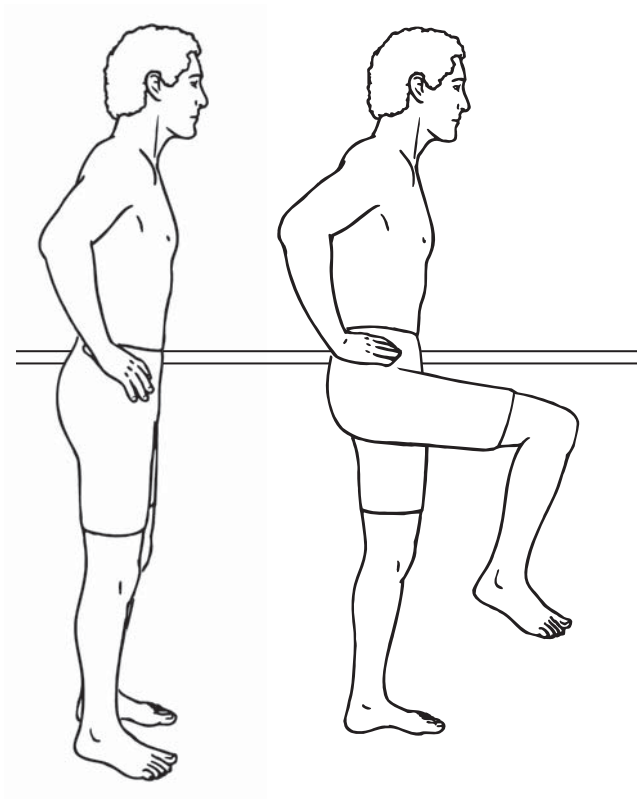
1. To maintain good balance, stand and support yourself with an object that is fixed.
2. Bring your operated leg out to the side using only hip muscles. Try not to bend your body to the side. (Keep your toes pointed forward as you do this.)
3. Hold for a count of three. Gradually increase the length of time the leg is held until you can hold for a count of 10.
4. Repeat \_\_\_\_\_ times.
5. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



## □ STANDING MARCHING

\_\_\_\_\_ (start date)

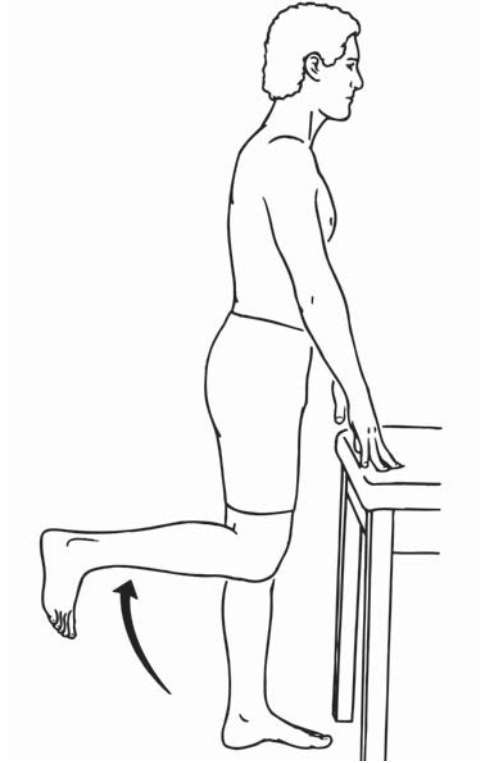
1. Standing, hold on to a countertop or back of a sturdy chair
2. March in place.
3. March only with the operated limb.
4. Remember to keep knee lower than the hip when bending (maintaining hip precautions).
5. Repeat \_\_\_\_\_ times.
6. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



**STANDING KNEE FLEXION**

\_\_\_\_\_ (start date)

1. Standing, hold on to a countertop or the back of a sturdy chair. Bend your operated knee.
2. Hold for \_\_\_\_\_ seconds.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.
5. Progress to \_\_\_\_\_ pounds at the ankle.



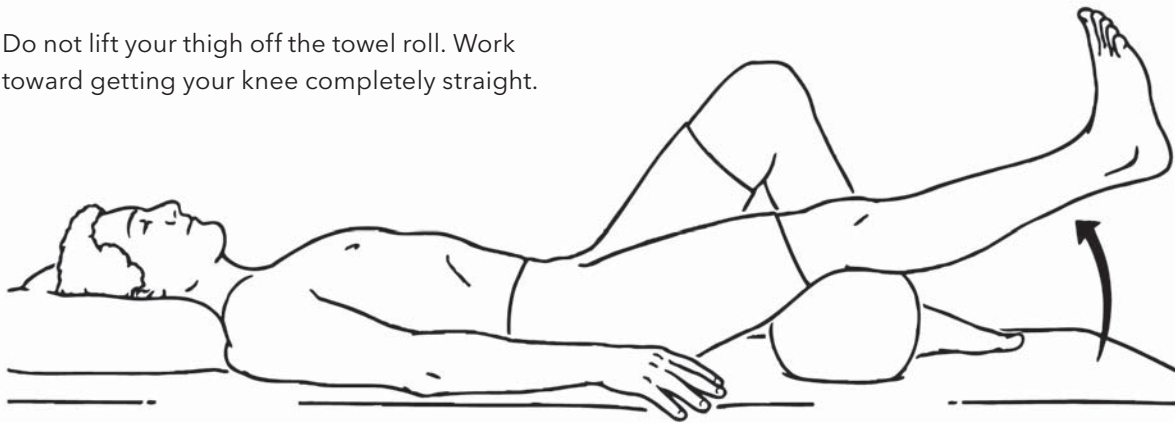




**TERMINAL KNEE EXTENSION**

\_\_\_\_\_ (start date)

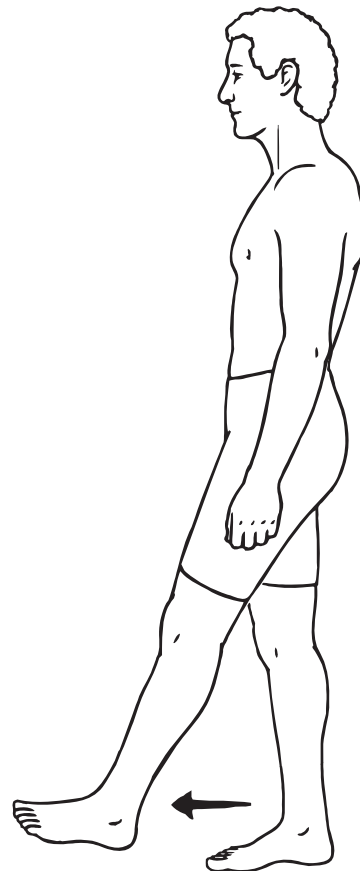
1. Place a towel roll or pillow under your operated knee so it is bent at nearly a 30 degree angle.
2. Slowly straighten your knee, keeping your upper thigh muscle tight. Pull your toes toward your nose.
3. Do not lift your thigh off the towel roll. Work toward getting your knee completely straight.
4. Hold this position for five seconds, gradually increasing to 10 seconds.
5. Repeat \_\_\_\_\_ times.
6. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



**HIP FLEX**

\_\_\_\_\_ (start date)

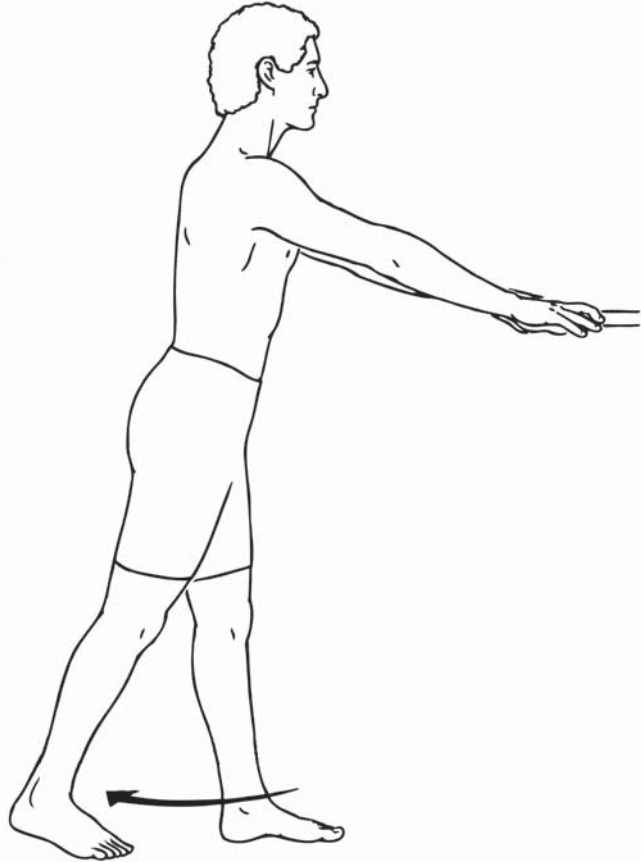
1. Standing, hold on to a countertop or back of a sturdy chair. Raise your operated leg forward with the knee straight.
2. Hold this position for \_\_\_\_\_ seconds.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.
5. Progress to \_\_\_\_\_ pounds at the thigh/ankle.



**□ HIP EXTENSION**

\_\_\_\_\_ (start date)

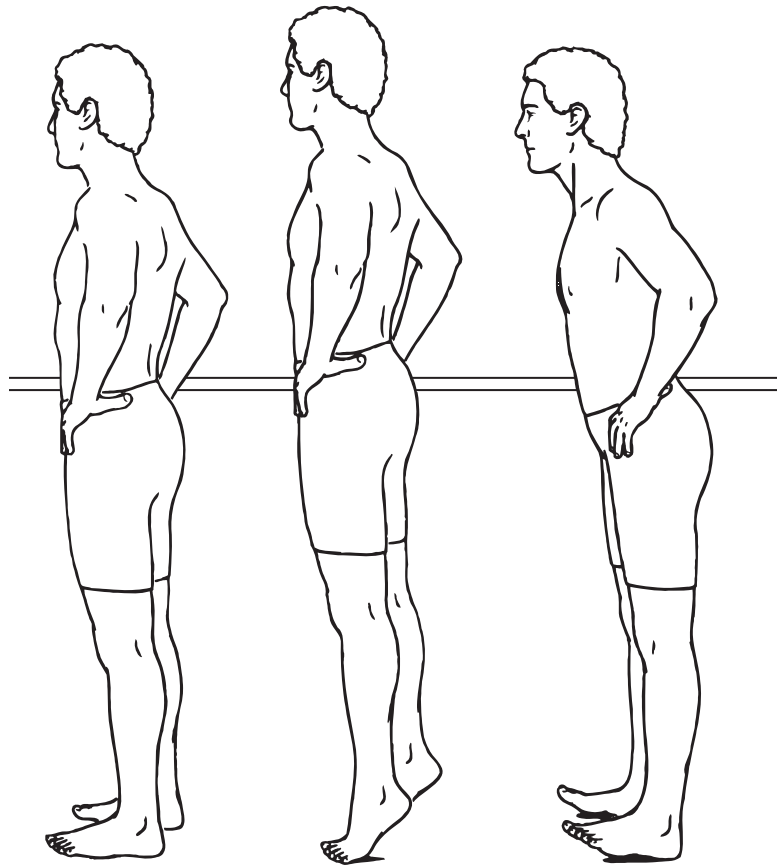
1. Standing, hold on to a countertop or the back of a sturdy chair.
2. Bring your operated leg back, keeping your knee straight. Do not move your upper body.
3. Hold for \_\_\_\_\_ seconds.
4. Repeat \_\_\_\_\_ times.
5. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



**□ HEEL RAISES/TOE RAISES**

\_\_\_\_\_ (start date)

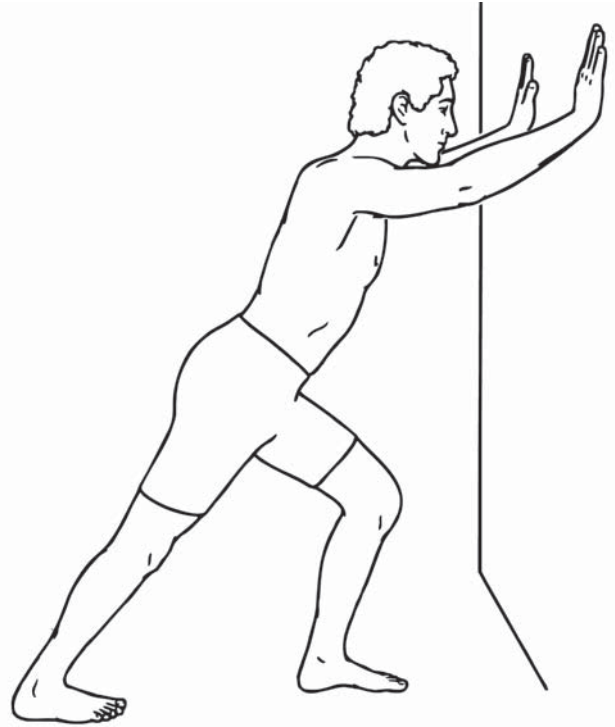
1. Standing, hold on to a countertop or back of a sturdy chair. Raise your operated leg forward with the knee straight.
2. Gently rise up on your toes, lower yourself back down, then roll back on your heels.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



CALF (GASTROC) STRETCH

\_\_\_\_\_ (start date)

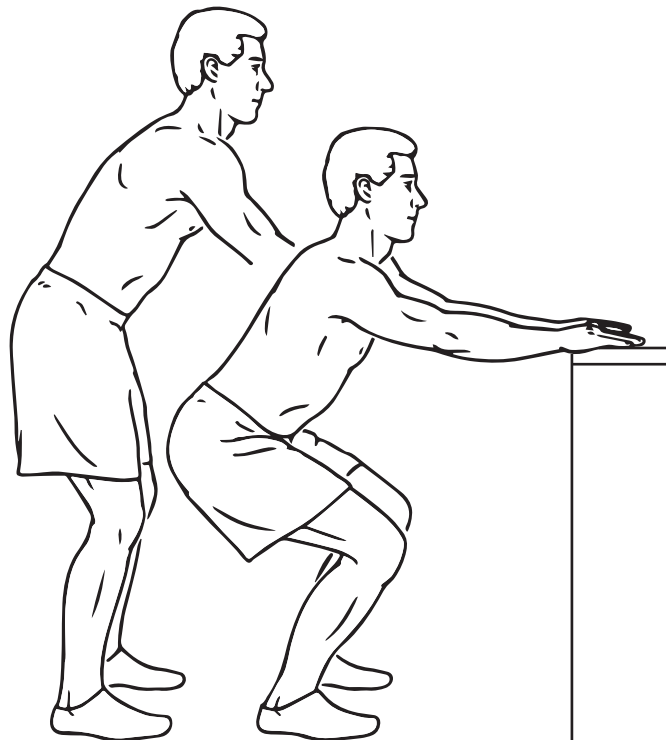
1. Standing, hold on to a wall or countertop for support.
2. With your right foot in front, and your left foot behind, lean forward, keeping your left heel touching the floor.
3. Hold for \_\_\_\_\_ seconds while counting out loud.
4. Reverse the position of your legs with your left foot in front and repeat the exercise \_\_\_\_\_ times.
5. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



SQUATS

\_\_\_\_\_ (start date)

1. Holding onto a wall or countertop for support, stand with your feet shoulder width apart.
2. Slowly bend your knees, keeping your upper body erect.
3. Return to the starting position.
4. Hold for \_\_\_\_\_ seconds.
5. Repeat \_\_\_\_\_ times.
6. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.

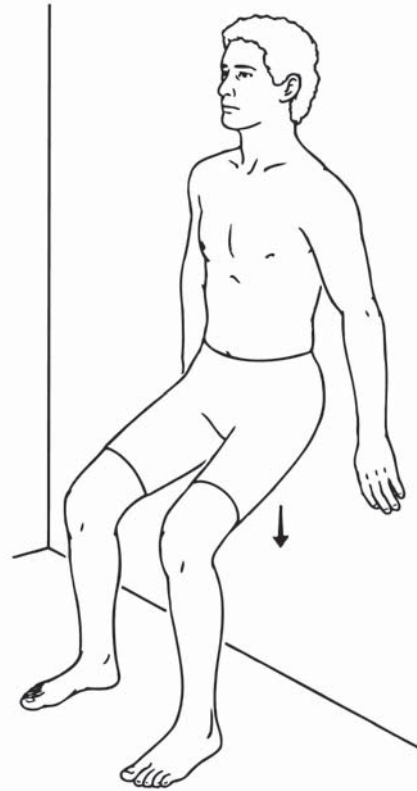




WALL SLIDES

\_\_\_\_\_ (start date)

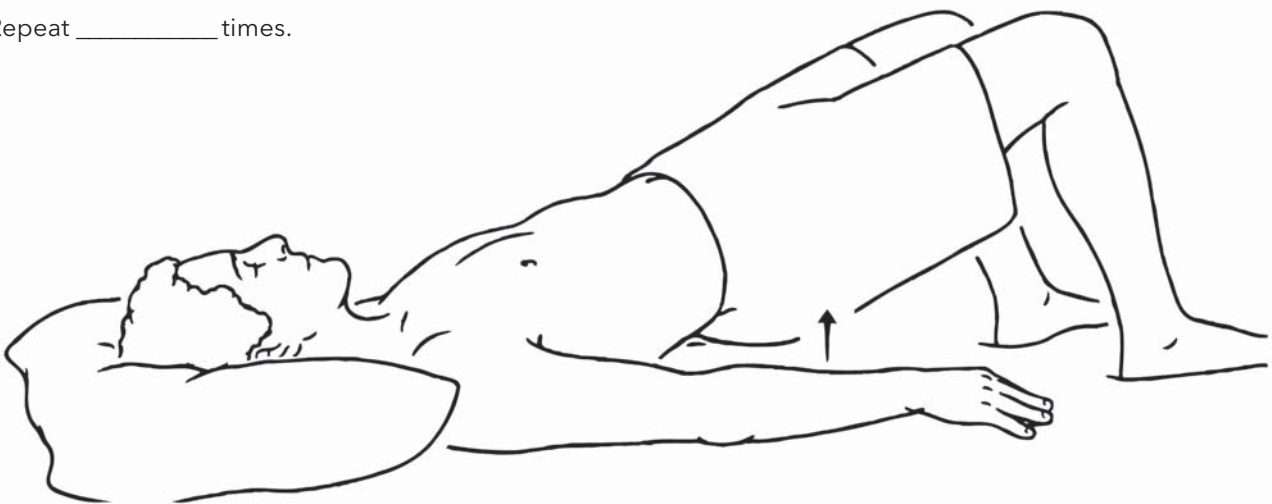
1. Leaning against a wall, lower your buttocks toward the floor until your thighs are parallel to the floor.
2. Hold for \_\_\_\_\_ seconds.
3. Tighten your thigh muscles as you return to the starting position.
4. Repeat \_\_\_\_\_ times.
5. Do \_\_\_\_\_ sessions per day.



BRIDGING

\_\_\_\_\_ (start date)

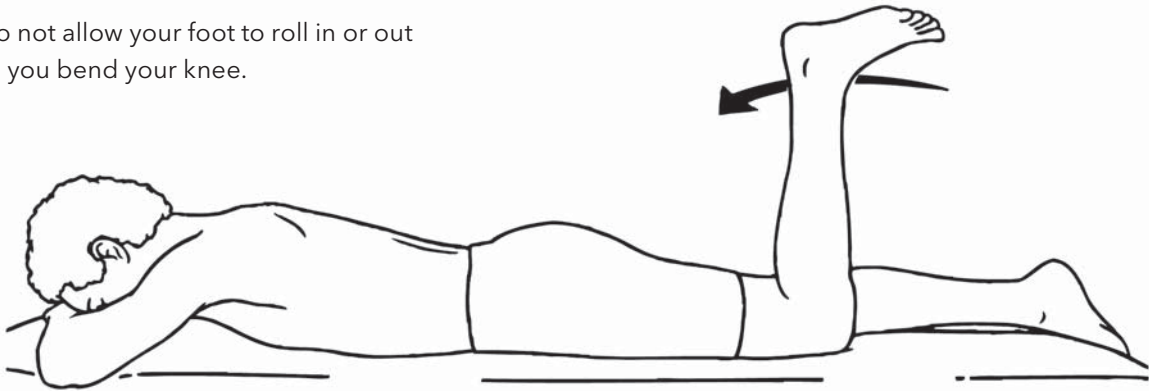
1. Lying on your back, with your knees bent and your feet flat on the surface, lift your hips off the mat.
2. Hold for \_\_\_\_\_ seconds.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sessions per day.
5. Progress to \_\_\_\_\_ pounds at the ankle.



**□ KNEE FLEX WHILE LYING ON YOUR STOMACH**

\_\_\_\_\_ (start date)

1. Lie on your stomach with a small towel roll under the thigh of your operated knee.
2. Bend the operated knee up as far as you can behind you.
3. Do not bend at your hip.
4. Do not allow your foot to roll in or out as you bend your knee.
5. Repeat \_\_\_\_\_ times.
6. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



**□ SIDE-LYING BOTTOM LEG RAISE (HIP ADDUCTION)**

\_\_\_\_\_ (start date)

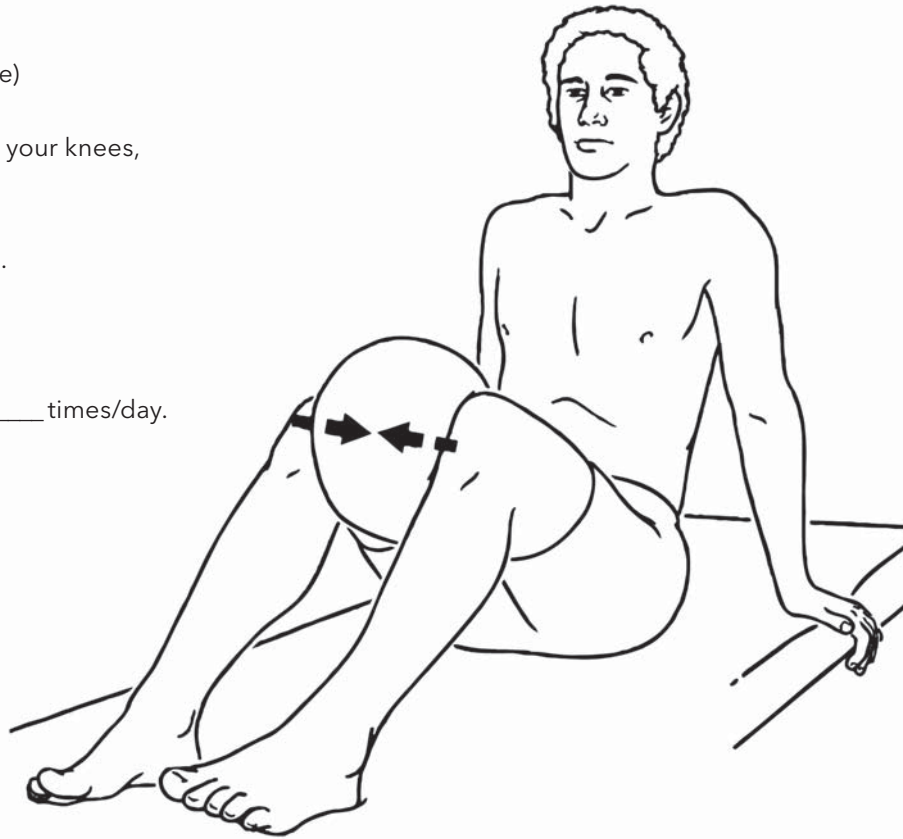
1. Lie on the operated side with the top leg bent and resting on the surface. Use a small towel roll or pad for comfort.
2. Keep your operated leg straight.
3. Lift your operated leg and hold for a count of five. Gradually increase to a count of 10.
4. Repeat \_\_\_\_\_ times.
5. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



**ISOMETRIC HIP ADDUCTION**

\_\_\_\_\_ (start date)

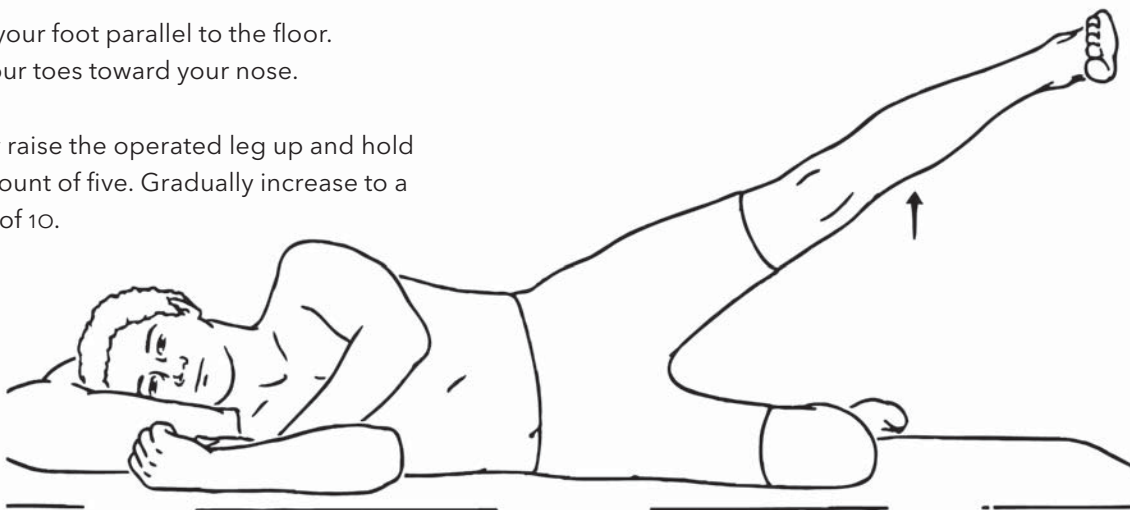
1. With a folded pillow between your knees, squeeze your knees together.
2. Hold for \_\_\_\_\_ seconds.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



**SIDE-LYING TOP LEG RAISES (HIP ABDUCTION)**

\_\_\_\_\_ (start date)

1. Lie on your non-operated leg with your bottom knee bent.
2. Keep your operated leg straight.
3. Keep your foot parallel to the floor. Pull your toes toward your nose.
4. Slowly raise the operated leg up and hold for a count of five. Gradually increase to a count of 10.
5. Repeat \_\_\_\_\_ times.
6. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



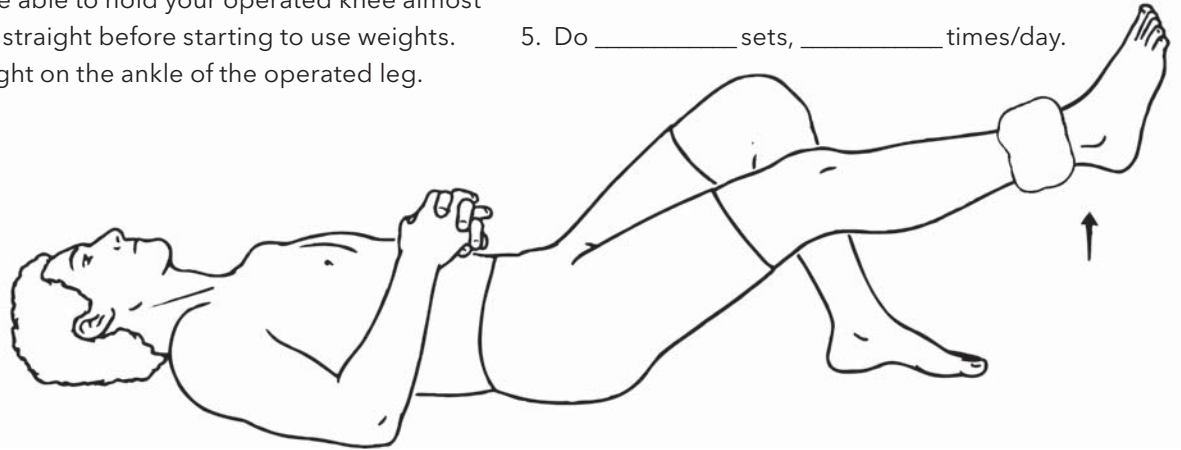


**STRAIGHT LEG RAISES WITH WEIGHTS**

Strengthening exercises should be done approximately three to four times a week or every other day.

\_\_\_\_\_ (start date)

1. When you can do 10 straight leg raises in a row and hold each to a count of 10, you are ready to begin with weights.
2. You must be able to hold your operated knee almost completely straight before starting to use weights. Place a weight on the ankle of the operated leg.
3. Begin with a one pound weight. Increase by one pound increments until you reach five to 10 pounds.
4. Repeat \_\_\_\_\_ times.
5. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



**KNEE CAP SELF MOBILIZATION (DOWNWARD KNEE CAP PUSH)**

The incision must be healed before doing this exercise.

\_\_\_\_\_ (start date)

1. Place both thumbs on the upper border of your knee cap. Gently push your knee cap down toward your foot.
2. Hold for \_\_\_\_\_ seconds.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.

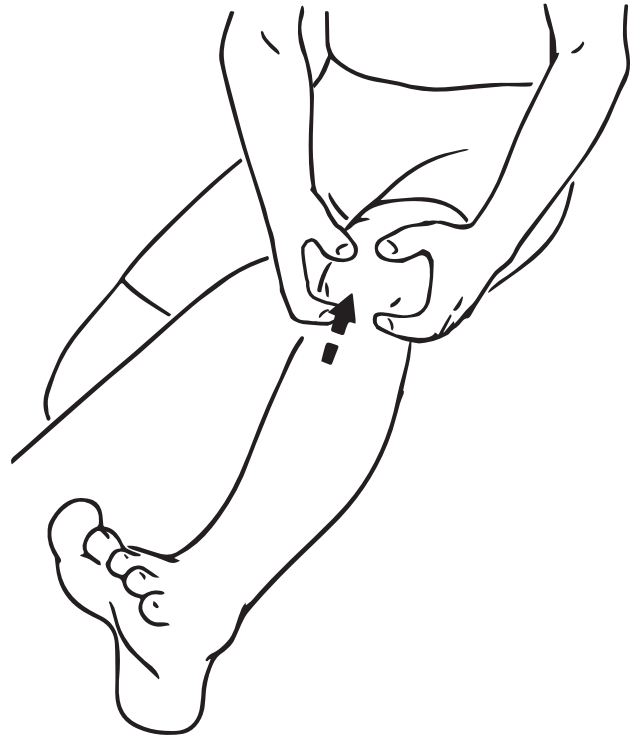


**KNEE CAP SELF MOBILIZATION (UPWARD KNEE CAP PULL)**

The incision must be healed before doing this exercise.

\_\_\_\_\_ (start date)

1. Place both thumbs on the upper border of your knee cap and both index fingers on the lower border of your knee cap. Using your index fingers, gently pull your knee cap up toward your hip.
2. Hold for \_\_\_\_\_ seconds.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.

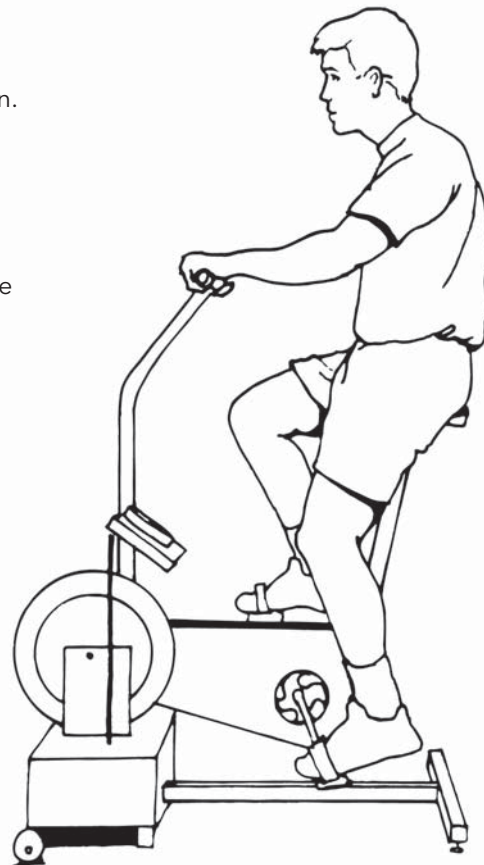


**CYCLING**

Do not attempt to cycle until you have your doctor's permission.

\_\_\_\_\_ (start date)

1. Raise the seat to the highest level so that you can still reach the pedals. No tension should be on the wheel.
2. Starting at a slow speed doing partial revolutions, cycle for 5 minutes.
3. As you can tolerate, lower the seat of the bike and increase the time.
4. Tension may be increased if your doctor feels appropriate.



KNEE FLEXION (HOOK-LYING)

\_\_\_\_\_ (start date)

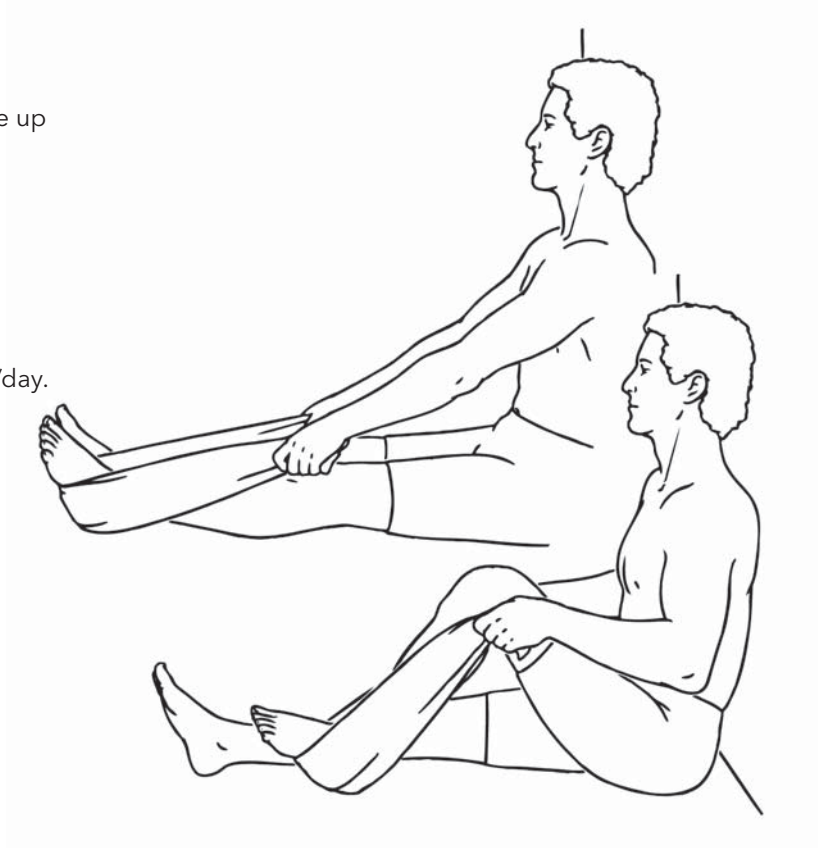
1. Bend knee as far as possible, then use other leg to gently push until stretch is felt.
2. Hold for \_\_\_\_\_ seconds.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



KNEE FLEXION

\_\_\_\_\_ (start date)

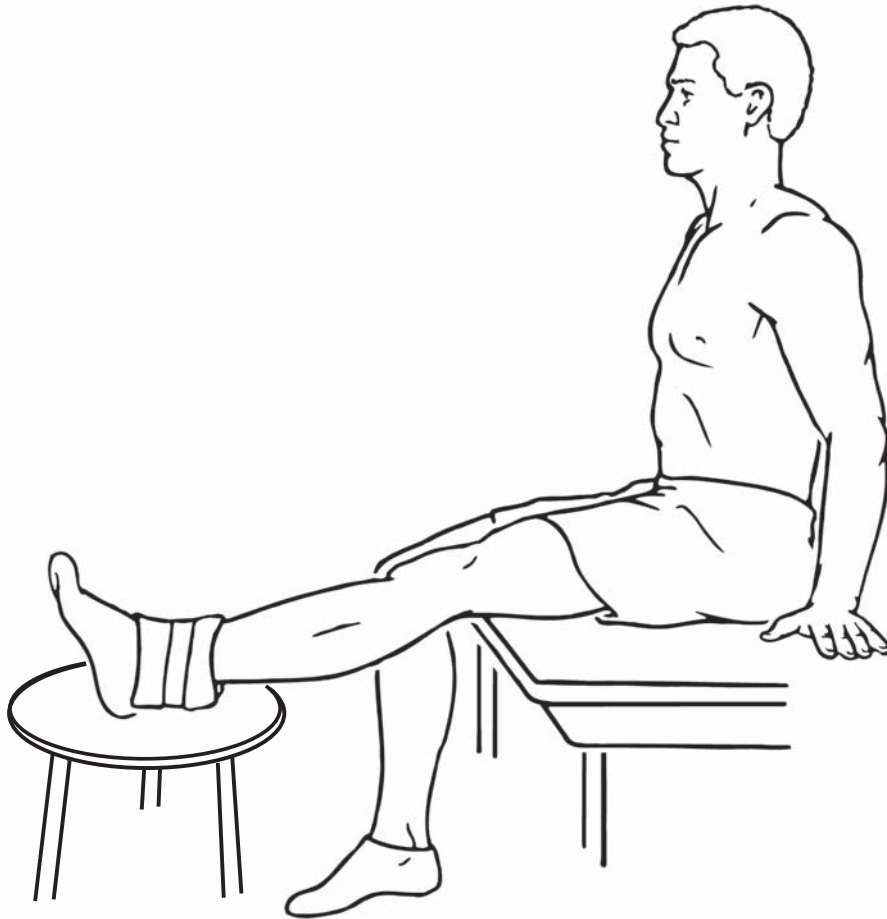
1. With towel around heel, gently pull knee up with towel until stretch is felt.
2. Hold for \_\_\_\_\_ seconds.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



## □ PASSIVE EXTENSION

\_\_\_\_\_ (start date)

1. Sit in a chair with your operated leg straight in front of you, supported by a footstool or a chair under your heel. Position your buttocks and lower back against the back of the chair. Make sure your toes are pointed up.
2. Allow your knee to straighten out and let your muscles relax. If you push down with your hand, apply force above your knee. This will reduce stress on your kneecap.
3. Hold this position for five minutes, gradually increasing the time as tolerated. Do this exercise 3 or 4 times daily until your muscles relax and your knee straightens fully.
4. Repeat \_\_\_\_\_ times.
5. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.





CLOSED CHAIN #1

\_\_\_\_\_ (start date)

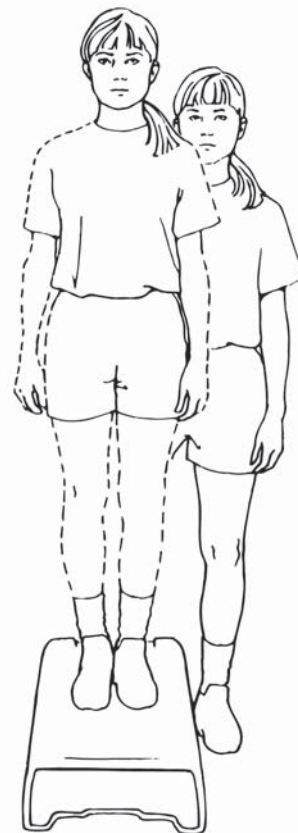
1. Move onto step, one foot and then the other.
2. Step back off the same way.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



CLOSED CHAIN #2

\_\_\_\_\_ (start date)

1. Step up sideways with one foot, then the other.
2. Step off the other side in the same way.
3. Repeat \_\_\_\_\_ times.
4. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



### CLOSED CHAIN #3

\_\_\_\_\_ (start date)

1. Step forward with operated leg onto the step.
2. Step over with the other leg, touching your heel to the ground, with no weight on the heel.
3. Return to start.
4. Repeat \_\_\_\_\_ times.
5. Do \_\_\_\_\_ sets, \_\_\_\_\_ times/day.



### WALKING

\_\_\_\_\_ (start date)

Walk three to four times a day, gradually increasing your time and distance. Continue to use appropriate assistive device (crutches, walker or cane) until your therapist or doctor tells you to stop.



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