



Session 8

C-PE 2 (3 units) **PATHFIT II Exercise-based Program**

Spring Semester 2024



Legs and Glutes Exercises

Basic Exercises for PE Classes



Session Objectives:

- Identify the different types of legs and glutes muscles and muscle group.
- Determine the significance of legs and glutes activities or workout in everyday movement routine.



Session Objectives:

- Identify the various exercises in improving legs and glutes muscles that is useful to personal fitness plan.
- Perform basic locomotor and non-locomotor legs and glutes exercises that can be incorporated to PE class activities.



Spring Semester 2024

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**MAJOR MUSCLES OF THE
LEGS AND GLUTES**



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MAJOR MUSCLES OF THE LEGS AND GLUTES



Quadriceps



Hamstring



Calves



Gluteus

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Quadriceps

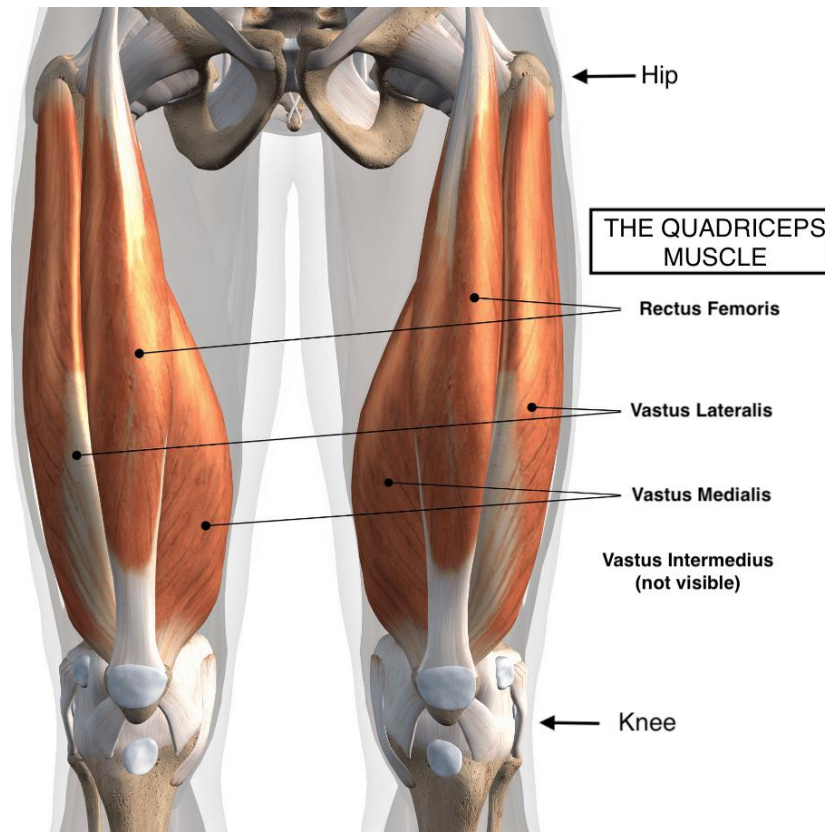


Figure 1: What the Quadriceps are and Why you Should Stretch them?
(Source: Kutcher, M. 2022:Online)

- ✓ The quadriceps (Quads) are located in the anterior part of the thigh muscles.
- ✓ The primary function is to flex and extend which are commonly happening on the knee.
- ✓ This is one of the strong muscles of the body.

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Hamstrings

- ✓ The hamstring muscles provide the stability and balance of your knees.
- ✓ Facilitates flexion and controls extensions on knee joint



Figure 2: Tip: One Exercise Isn't Enough for Hamstrings.
(Source: Tumminello, N.. 2017:Online)

The quadriceps and hamstring are twin muscles that are working together to activate efficient movement on thigh muscles.

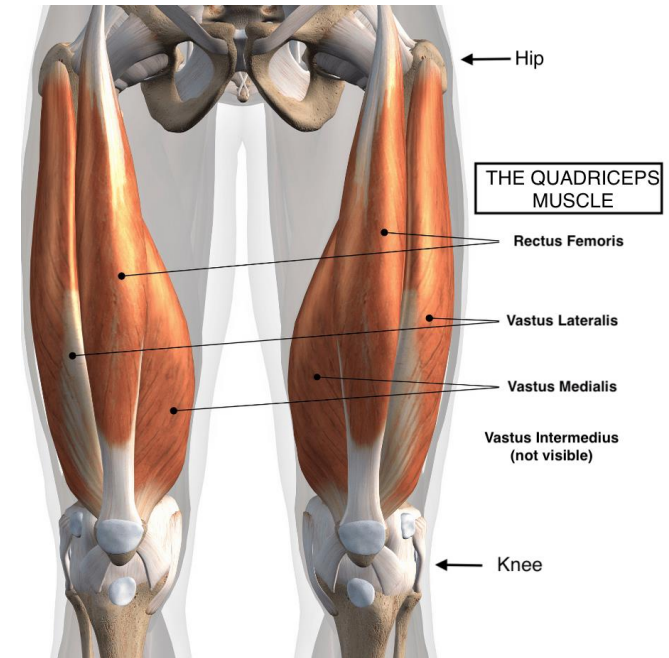


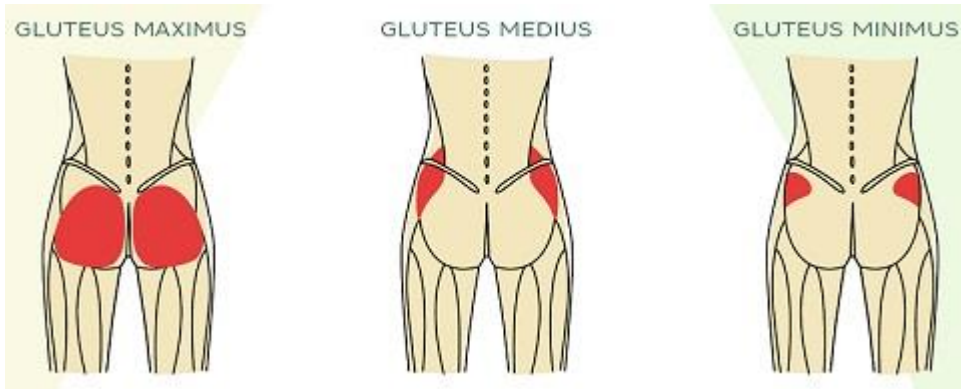


Figure 3: Calf Muscle Tightness
(Source: Davda, K. ND. (Online))

Calves

- ✓ Responsible for standing, walking, running and walking.

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Glutes

- ✓ Situated at the posterior part of the pelvis.
- ✓ Gluteus maximus, medius and minimus
- ✓ Responsible for abduction and adduction, rotation and hip extension



Figure 4: Importance of Glute Activation.
(Source: IntoWellness Administrator. 2021:Online)



BASIC ACTIVITIES FOR LEGS & GLUTES EXERCISES



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BASIC ACTIVITIES FOR LEGS & GLUTES EXERCISES

Basic Step Up & Down
Step Up & Down
Alternate Knee to Chest
Alternate Forward Lunge
Side Lunges

Double High Knee Raise
Single High Knee Raise
Front to Side Knee Raise
Squats
Squat Jumps

Alternate Donkey Kicks
Side (Lateral Jumps)
Stamping

Basic Step up & Down

- Alternate step up and down
- Maintain the line of the body when doing the activity to bring the weight of the body to the glutes and legs while at work.



Figure 5: Photos owned by the author.
In the photos is the author's PE students.

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Step up & Down

- Alternate step up and down
- Maintain the line of the body when doing the activity to bring the weight of the body to the glutes and legs while at work.
- This pace is another variation activating the flexibility of the knee joints and ankle



Figure 6: Photos owned by the author.
In the photos is the author's PE students.

Alternate Knee to Chest

- Alternately raise the knee to the chest level and bring the leg to the rear.
- This activates the glutes, quads, hamstring and calves.

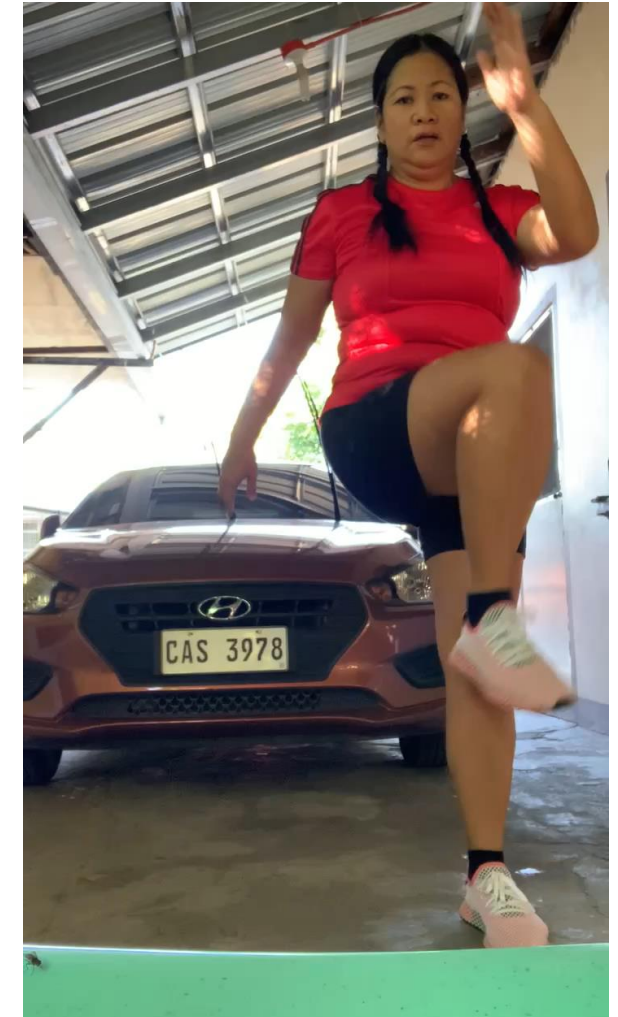


Figure 7: Photos owned by the author.
In the photos is the author's son.

Alternate Forward Lunge

- Bring the legs in front alternately then bend the knee keeping the body a little low, return to base.
- Check on your balance to avoid wobbly movements.

Figure 8: Photos owned by the author.



Side Lunges

- Laterally slide your movement to one side (L) bring back to raise the knee in front. Repeat.
- This activates the inner thigh, the glutes and the quads.

Figure 8: Photos owned by the author.



Double High Knee Raise

- Combine the idea of jogging in place and high knee raise in a double count pace.
- This activity enhances balance and coordination of movement.

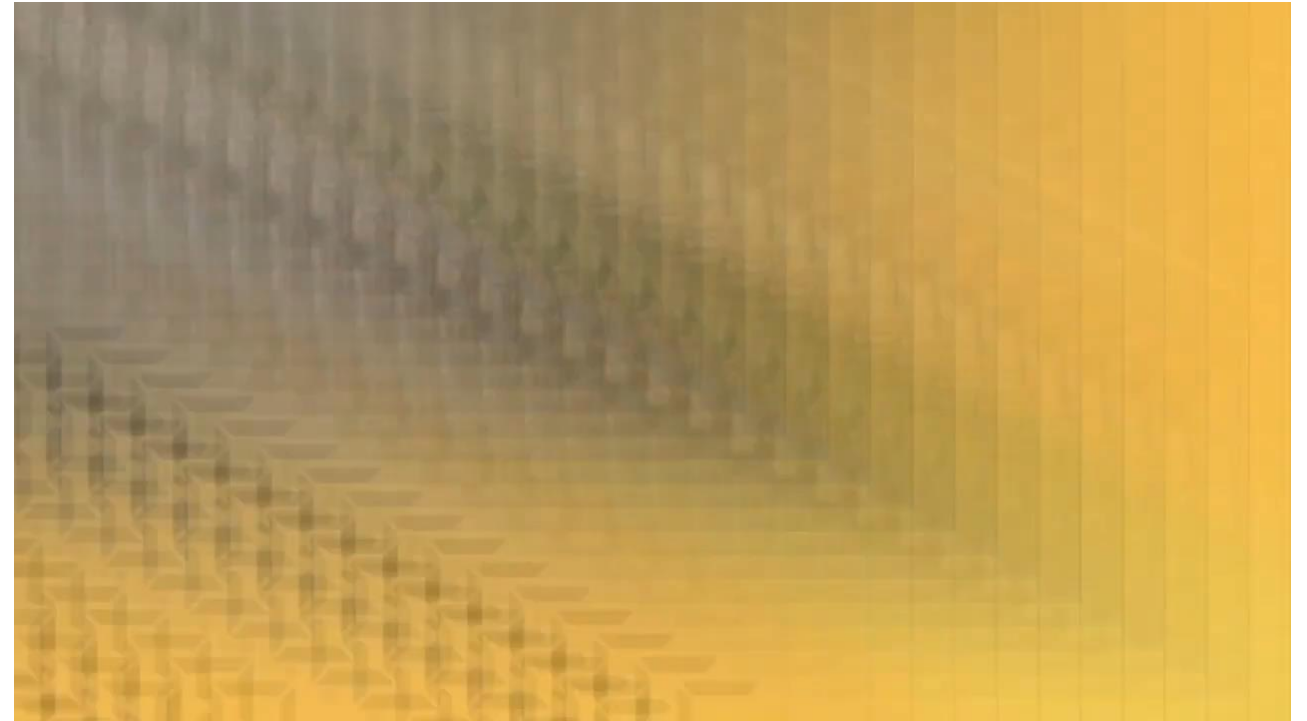


Figure 9: Photos owned by the author.
In the photos is the author and her colleague.

Single High Knee Raise

- This is a good activity for all sports that needs leg muscle endurance.
- Execution must be consistently done to achieve the efficiency and effectiveness of movement.
- Do not lean back and forward to keep your balance.



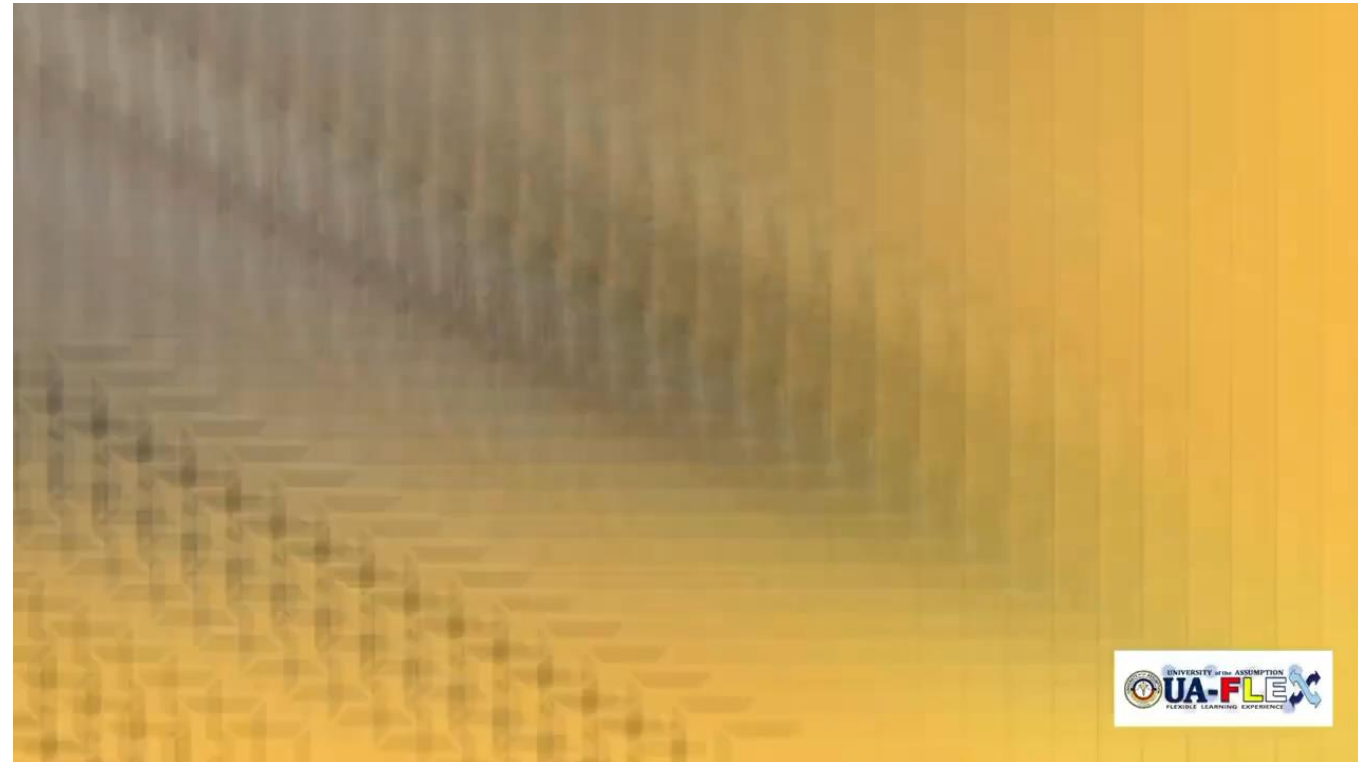
IGH KNEES



Figure 10: Photos owned by the author.
In the photos is the author and her colleague.

Front to Side Knee Raise

- This activity can be part of exercise drills to improve groin and leg movement.
- The purpose is to loosen the tightness on the groin and hip region.



Squats

- This is just one of the squats variations.
- You can consider holding a ball or anything that is safe to add weight on the arm.



Figure 12: Photos owned by the author. In the photos is the author's son.

Squat Jumps

- A complex activity that enhances legs and glutes strength-endurance.
- The intensity, speed, execution varies depending on the target.



Figure 13: Photos owned by the author.
In the photos is the author's son.

Alternate Donkey Kicks

- This primarily targeting the glutes.
- Variation can come from doing an alternate movement of the legs to designing sets of repetitions.



DONKEY KICK



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Side (Lateral) Jump

- This targets mostly the calves muscle.
- Remember to execute this with bouncy movement to avoid pain in the knee.



SIDE JUMP

Stamping

- Speed development for the legs. Stamping is commonly done in basketball, running, volleyball.

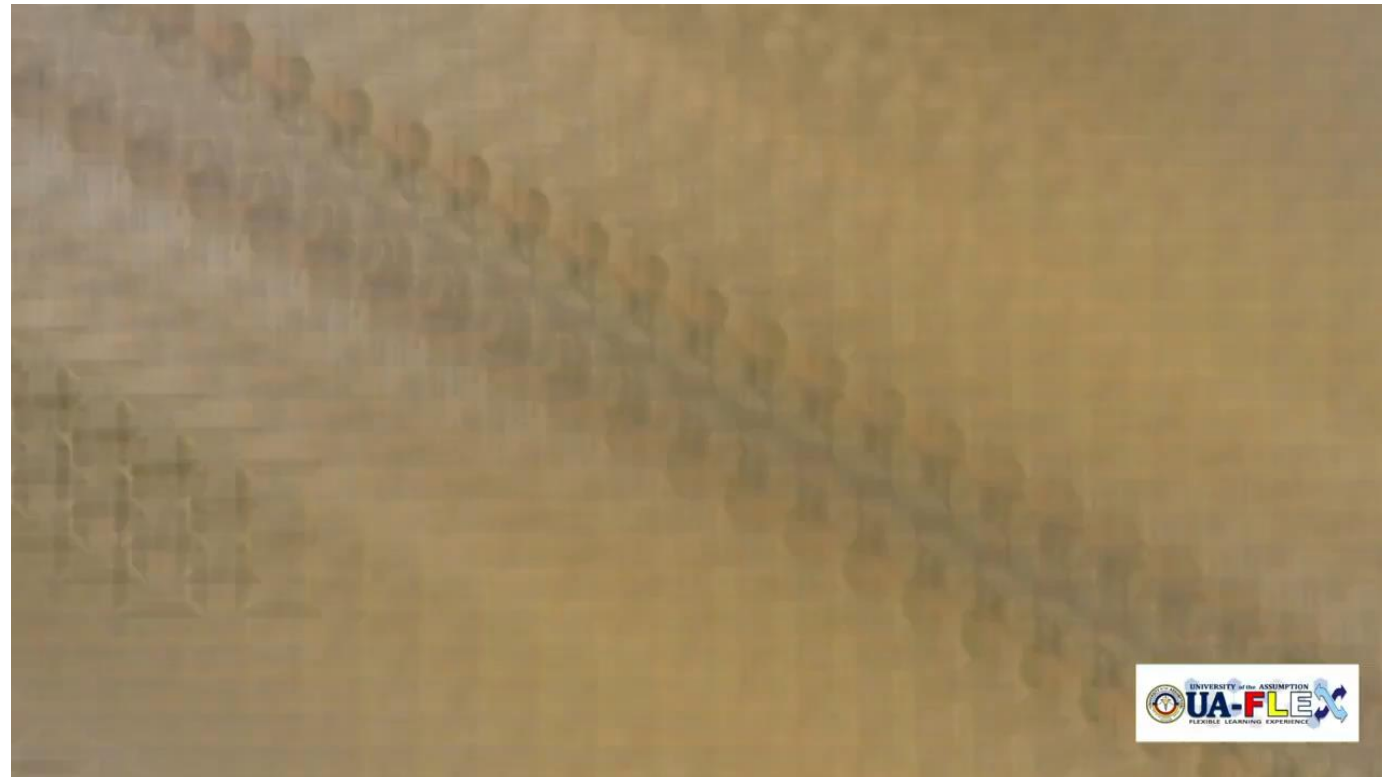


Figure 15: Photos owned by the author.
In the photos is the author and her colleague.



OTHER ACTIVITIES TO CONSIDER:

Brisk walking

Running

Cycling

*use of equipment



References:

Callo, L. (2017) Physical Education and Health Manual, DepEd, Philippines

Davda, K. (ND). Calf Muscle Tightness. [Online Image] [Accessed on May 11, 2024]
<https://www.precisionfootandankle.co.uk/calf-tightness-orthopaedic-foot-ankle-surgeon-high-wycombe-buckinghamshire.html>

Dickson, J. 2023. The Anatomy of Your Leg Muscles, Explained (and How To Train Them). [Online Article] [Accessed on May 10, 2024] <https://barbend.com/leg-anatomy/>

JOHO Fitness, (ND). Importance of Glute Activation. [Online Image] [Accessed on May 11, 2024] <https://johofitness.org/importance-of-glute-activation/>



References:

Kumar, K. ND. What are the Benefits of Leg Workout? [Online Article] [Accessed on May 10, 2024]

[https://www.medicinenet.com/what are the benefits of leg workout/article.htm](https://www.medicinenet.com/what_are_the_benefits_of_leg_workout/article.htm)

Kutcher, M. (2022). What the quadriceps are and why you should stretch them. [Online Image] [Accessed on May 18, 2024] <https://morelifehealth.com/articles/stretching-the-quadriceps>

Lagyap, C. (2017) Physical Education and Health Manual, DepEd, Philippines



References:

Lawler, M. (2023). The Best Exercises for Stronger Glutes, Quads and Hamstring. [Online Article] [Accessed on May 11, 2024] <https://www.everydayhealth.com/fitness/best-leg-exercises-for-stronger-glutes-quads-and-hamstrings/>

Oyco, V. (2000). "Physical Fitness for College Freshmen" Revised Edition

Pabelico, N. (2017) Health Manual, DepEd, Philippines

Tumminello, N. (2017). Tip: One Exercise isn't Enough for Hamstrings. [Online Image] [Accessed on May 11, 2024] <https://www.t-nation.com/training/tip-one-exercise-isnt-enough-for-hamstrings/>



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SELF CHECK ACTIVITY:

Activities	Execute 8 Repetitions	Identify which muscle is primarily being targeted (quads, glutes, hamstring, calves)
Basic Step Up & Down		
Step Up & Down		
Alternate Knee to Chest		
Alternate Forward Lunge		
Side Lunges		
Double High Knee Raise		
Single High Knee Raise		
Front to Side Knee Raise		
Squats		
Squat Jumps		
Alternate Donkey Kicks		
Side (Lateral Jumps)		
Stamping		



Buddy-system Exercise Work Out

YES

NO

	YES	NO
Basic Step Up & Down		
Step Up & Down		
Alternate Knee to Chest		
Alternate Forward Lunge		
Side Lunges		
Double High Knee Raise		
Single High Knee Raise		
Front to Side Knee Raise		
Squats		
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Side (Lateral Jumps)		
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