

# Hamstring Flexibility Lab

1) Measure passive hip flexion:  (see end of document)

2) **JOG** for 2 minutes (in place, on a treadmill, around the block) and re-measure passive hip flexion:

3) Go through 3 cycles of contract for 10 sec and stretch for 30 sec  
(PNF Stretching Assignment #2)

4) Re-measure passive hip flexion:

PNF stretching is currently the fastest and most effective way known to increase static-passive flexibility. PNF is an acronym for *proprioceptive neuromuscular facilitation*. It is not really a type of stretching but is a technique of combining passive stretching and isometric stretching in order to achieve maximum static flexibility. PNF refers to any of several *post-isometric relaxation* stretching techniques in which a muscle group is passively stretched, then contracts isometrically against resistance while in the stretched position, and then is passively stretched again through the resulting increased range of motion. PNF stretching usually employs the use of a partner to provide resistance against the isometric contraction and then later to passively take the joint through its increased range of motion.

## Conclusion:

5) What was the difference between your first measurement and after you jogged? Why?

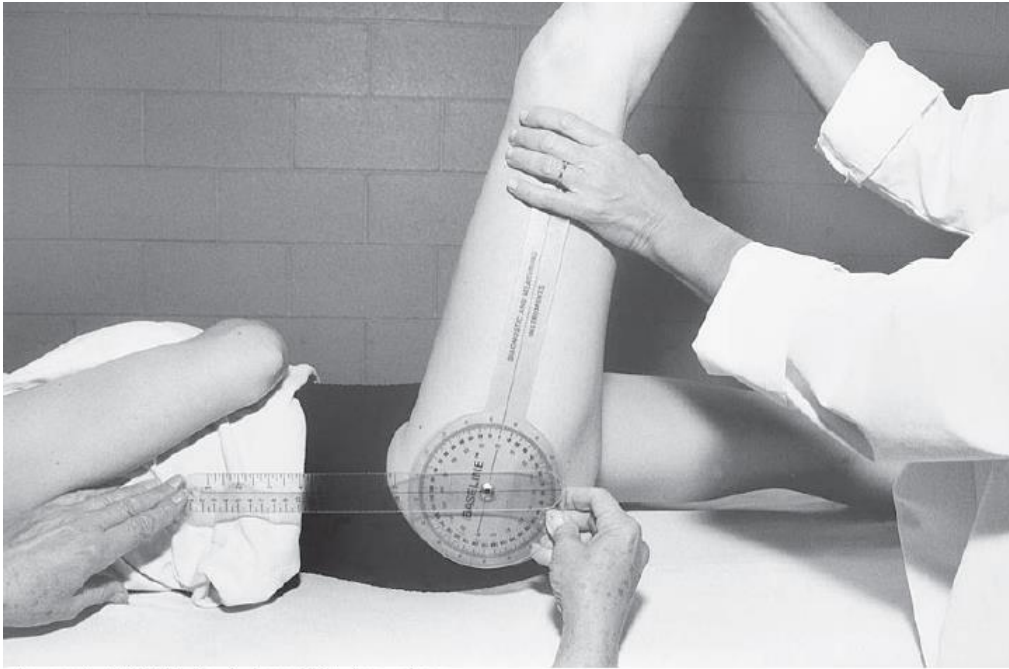
6) When is the best time to stretch? (Before or after a warm-up)

7) What did you see after each contract-relax cycle?

8) What does PNF Stand for and how do you perform this method?

9) Which stretching method is most effective?  
(Active Stretching, Passive Stretching, and PNF Stretching)

10) What did you learn after completing this activity?



Source: Cynthia C. Norkin, D. Joyce White: Improving Measurement of Joint Motion: A Guide to Goniometry, Fifth Edition, [www.FADavisPTCollection.com](http://www.FADavisPTCollection.com)  
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When measuring passive hip flexion a goniometer is typically used. This will not be available to students when distance learning. Please use what you have available; measuring tape, yard stick, ruler, a piece of string perhaps. I suggest placing a dot on the medial side of each knee and using that as your reference points so that you are measuring the same distance each time. When passive stretching don't forget to flex the hip (lift the leg), while keeping the other leg on the table, if the non-stretching leg lifts off of the table then you have moved the passive leg too far.