Physics 1101 Experiment 3 Homework

1. Give an example where is force due to static friction does not equal $m_s N$, where m_s is the coefficient of static friction and N is the normal force of contact.

2. What values are you supposed to use for the three radii in the experiment?

3. Calculate the value of Δx for each of the radii you will use in this experiment. Remember that the circumstance of the circle is divided into 10 equal parts.

4. If you could double the maximum force due to static friction with all other quantities left unchanged, how much would the critical velocity change?

Note: You should answer questions 2 and 3 in the new version of Experiment 3 before you come to class.