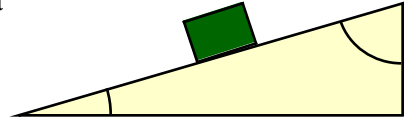


SPSP 311
Date _____

Name _____ Table _____
Other group
members present _____

Finding friction coefficient (short lab)

1. Derive the formula for the coefficient of friction for the case of a box resting on an inclined plane. Consider what happens as the angle of the incline is increased. What is true at the instant before the box starts to slide about the frictional force? What is true the instant after it starts to slide?



2. Do an experiment with an eraser and a white board. At what angle does the eraser first start sliding? Repeat this several times and estimate the uncertainty in the angle. Use the angle to determine the coefficient of static friction between the board and the eraser and its uncertainty. Be certain to say which side of the eraser you slid.

3. What object can you find that has the largest value of the coefficient of friction?