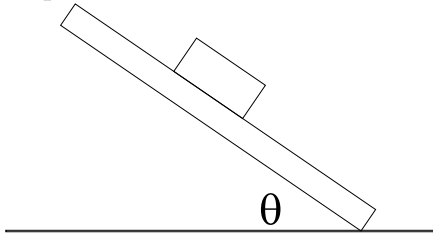


Physics 303K Worksheet 5

1. Name (Write legibly! If I can't read your name, you don't get credit for attending.):

2. Aman, Ralph, and you are playing Texas Hold-em poker. When Ralph is losing, he has the annoying habit of tilting the table up with his knees. Your cards, chips, drinks, and snack food are all resting on the table. To maximize his annoyance, Ralph likes to see how far he can tilt the table without anything sliding down the inclined tabletop. You are about to win all his money, so you want to ignore his distractions. Given the coefficient of static friction μ_s , at what angle will your poker chips start to slide? How does this angle change for heavier items? How does this angle change if you were playing poker on the moon (where $g=1.6 \text{ m/s}^2$)? What is the condition for the poker chips never to slide off the table?



3. What did you wish you knew *before* the midterm?