

PHYS 111 K

HOMEWORK #8

Due : 5 Nov. 2015

1. A chain of uniform density and length L lies on a table with a portion of the chain overhanging the edge of the table. If the coefficient of friction between the chain and the table is μ , what is the maximum fraction of the chain that can overhang the edge before the chain slides off the table?
2. Conceptual question #2 on the top of p. 210.
3. Problem 2 on the bottom of p. 210.
4. Problem 12, p. 211
5. Problem 32, p. 212
6. Problem 43, p. 212
7. Problem 48, p. 213
8. A newly discovered planet has a radius that is $1/2$ the Earth's radius and a mass that is $1/10$ the mass of the Earth. What is the value of surface gravity on this planet (it is much easier to solve this using ratios).