

Name _____

Homework Assignment #7 due in class Wednesday, October 18

Cover sheet : Staple this page in front of your solutions.

INSTRUCTIONS : Write the *answers* (without calculations) on this page; write the detailed *solutions* (written clearly) on your own paper.

[31] Problem 4.3.** *Answer: Is F conservative? Why or why not?*

[32] Problem 4.8.** *Answer: The angle, in degrees, when the puck comes off the surface is*

[33] Problem 4.9.** *Answer: How does the frequency depend on g ?*

[34] Problem 4.10.*

Answer: Consider points on the line with $x = 0$ and $z = 1$; what is the gradient of h ?

[35] Problem 4.18.** *Answer:*

[36] Problem 4.23.** *Answer: The potential energy function for part (b) is ...*

[37] Write full solutions for the three exam questions (on the back of this page).