

#5 due 11/19

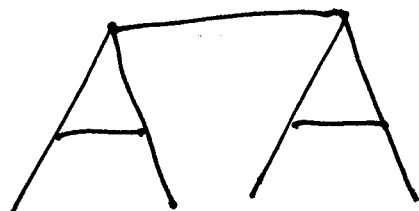
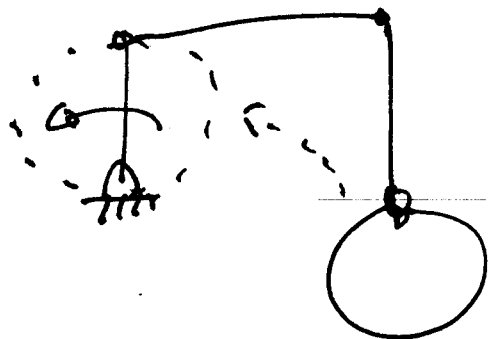
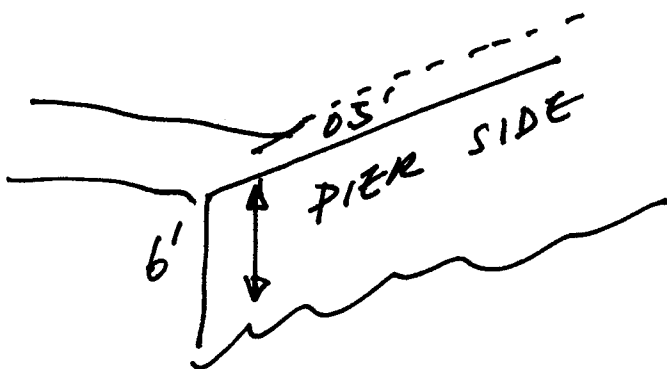
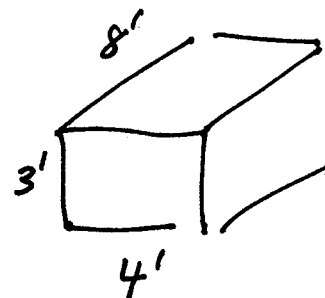
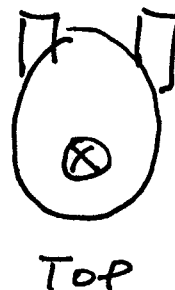
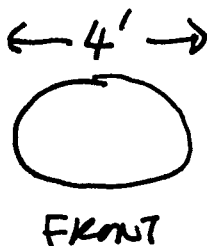
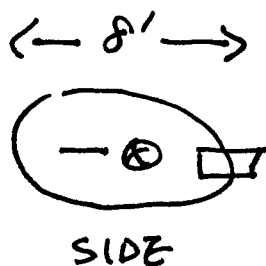
ME 374: UUV Launch/Recovery Mechanism Design Project

Project Description, Design, Analysis, and Simulation

Due: Friday, December 10, 2004 @ 4:30 PM

Where: Holmes 240B

Conduct background information, design a mechanism, analysis the mechanism, and simulate the motions of the mechanism for launching and recovering an unmanned underwater vehicle (UUV) from the side of a pier (or possibly a ship). The launch and recovery is currently performed by using an A-frame and cables. A new design utilizing the motion limiting aspects of 4-bar or 6-bar linkages as well as the mechanical advantage that can be produced these linkages are being requested. The UUV is capable of reaching full deep ocean depths (6000 meters) so it is quite heavy from the weight of the power source and its syntactic foam (static buoyancy compensation material). A typical UUV with these types of capabilities weights 10,000 lbs (or approximately 5 tons). This type of UUV is also the size of a mid-sized automobile or sport utility vehicle.



- A-FRAME LIFT -

