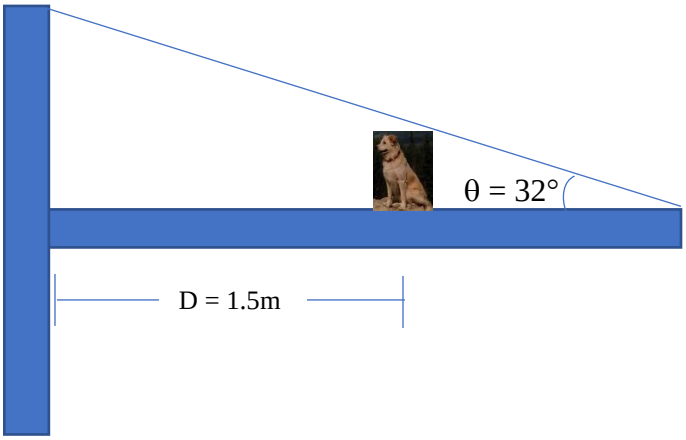
Hand In Problem 2

A 75kg dog sits down 1.5 meters of the way down this 2.2 meter long extended platform which is suspended from the end by a cable as shown. The platform has a mass of 1234kg. What is the Tension in the cable?



Chapter 12 could be better named "All of Ph 211 with a twist".
During the beginning of this first week on Chapter 12 we first covered the concepts of angular position, angular velocity and angular acceleration. In lab and on Friday we next looked at the concept of torque.

The effect of a force in creating a torque can be described by the equation $\vec{\tau} = \vec{r} \times \vec{F}$.

For a situation in equilibrium, here is what our problem solving steps should look like:

1. Draw a picture!
2. Set up a "good" coordinate system
3. Draw a FBD for every body in the problem.
4. If a body is being "torqued", then draw a Torque Diagram.
5. Derive your equations and solve.