Week 8: Rotational Dynamics

1. Familiarize yourself with the set up and the program "rotate"
2. Spin the wheel collect data and press "g" to plot the data. Discuss your results. We will have a class discussion.
3. Hang a mass with your string wrapped around a wheel collect data and discuss your results. We will have a class discussion.
4. Repeat # 3 for many masses and if you like different wheels. Put some of your data on the board.
5. Use the data to investigate the relationship between torque and angular motion.
6. From your data verify that the relationship bellow for rotational inertia for the wheel is correct.

$$I = \frac{1}{2} M \frac{V_1 R_1^2 + V_2 R_2^2 + V_3 R_3^2 + V_4 R_4^2}{V_1 + V_2 + V_3 + V_4}$$