

QUESTIONS TO HAND IN – EXPERIMENT 13

NAME _____

LAB INSTRUCTOR _____ LAB DAY/TIME _____

1. A bicycle wheel has a radius of 0.4 meters, and turns through an angle of 180° . Express this angle in radians.
2. The same wheel turns through 5 revolutions per second. What is the angular velocity ω in radians/s?
3. If the wheel goes through the 5 revolutions in 1 second, what is the linear speed of a piece of mud on the tire ?
4. Which has the higher moment of inertia, a circular tire with all the mass concentrated at the rim, or a solid disk of the same radius? Explain.
5. Which is easier to "rev" up from a standing start, a solid wheel or a ring of the same mass? Explain.