**QUESTIONS TO HAND IN – EXPERIMENT 13**

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**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 ** 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.