**Physics**

**Group Quiz 7.2**

Name

Favorite Movie

**Show your work, and circle your answers and use sig figs to receive full credit.**

1. If I twirl the cup of water on the platform over my head with a period of 0.850 seconds, what is the minimum radius the strings can have for the water to stay in the cup?

2. The Rock-O-Plane at Oaks Park pulls 0.720 "g"s of centripetal acceleration in a vertical circle. What "g" force do the riders feel at the top and at the bottom?

3. Riders on the Puke-O-Rama read -1.40 "g"s at the top (inverted "g"s). What "g"s is the ride doing, and what "g"s would they measure at the bottom? What is the acceleration of the ride in m/s/s?

4. A Ferris Wheel has a radius of 8.60 m and tangential velocity of 5.00 m/s. What "g" force do they read at the top and the bottom of the ride?

5. A vertical circle ride generates a "g" force of 3.70 "g" at the bottom. If the ride has a radius of 5.30 m, what is the period of motion of the ride?