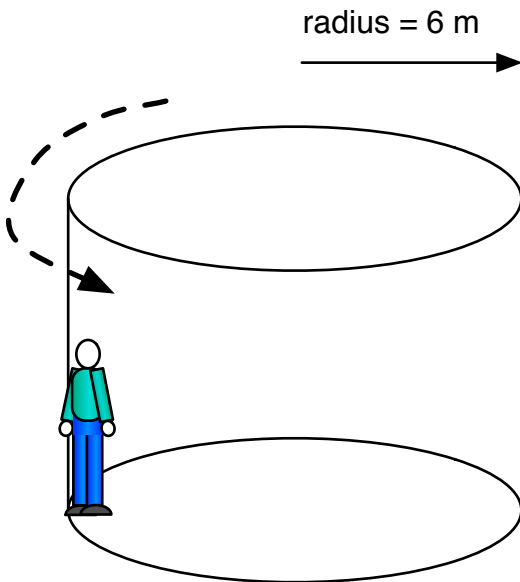


# Wk 23 Circular Motion

## Spiny Ride Practice

name: \_\_\_\_\_



$$accel_{CENTRIPETAL} = \frac{v^2}{r}$$

then divide by 10 to convert to g's

**SHOW WORK!**

1. The Gravitron ride takes 30 seconds to spin around 10 times.
  - a) Calculate the time it takes to spin around once.
  
  
  
  
  
  
  
  
  
  
  - b) Calculate the distance the person goes around each spin. (circumference!)
  
  
  
  
  
  
  
  
  
  
  - c) Calculate the person's velocity. (velocity = distance / time)
  
  
  
  
  
  
  
  
  
  
  - d) Use the formula to calculate the centripetal acceleration of the person.
  
  
  
  
  
  
  
  
  
  
  - e) How many g's is that?