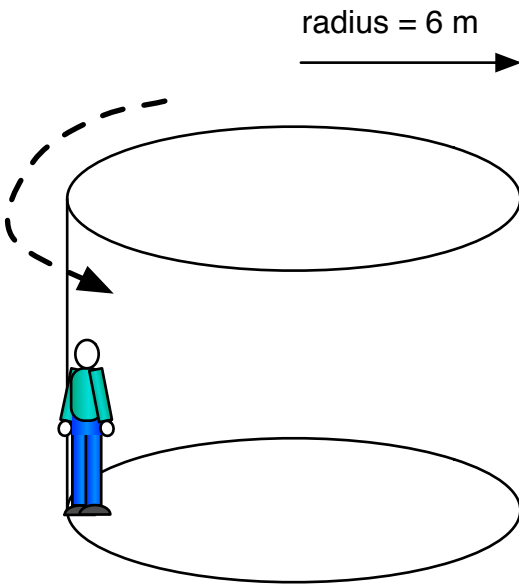


Wk 24 Spinny Ride

Spinny 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?