Do Now

- Check your homework with the answers that are on either sides of the room.

- Write the problem(s) that you would like to see solved most on your whiteboard.

Requested HW

Today

- Review of topics for quiz tomorrow.

- These include: 1) angular velocity, 2) centripetal acceleration, 3) centripetal force and 4) amusement park physics.

- We should have time to review all topics.

Angular Velocity

- The "speed" that something moved around a circle.

- This is determined by the circumference of the circle divided by the time it takes to travel around it once.

A hard drive spins at 7200 RPM. If the disc has a radius of 0.07m, what is the speed of the edge of the hard drive?
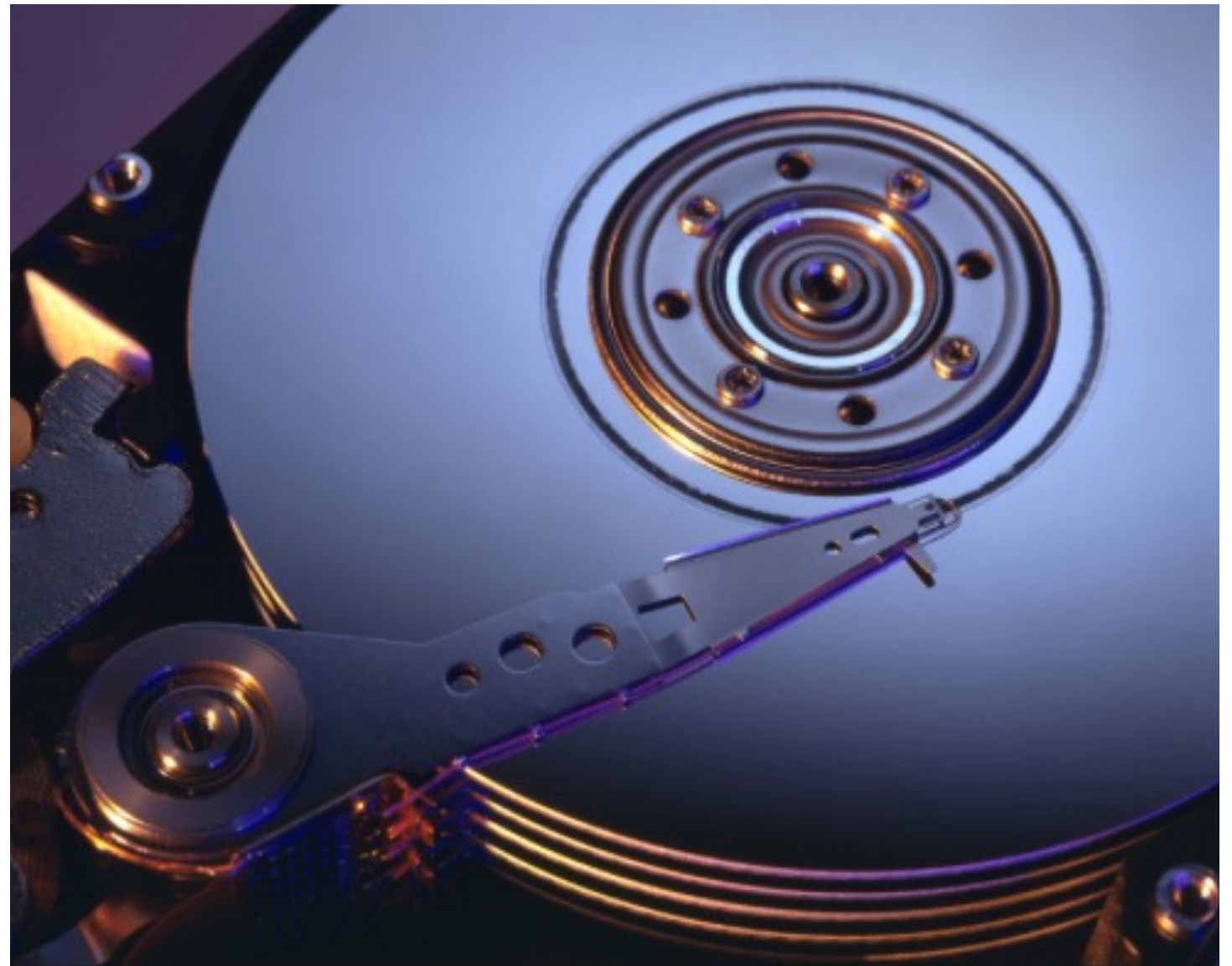
CD Exploding 23000 rpm

How Strong is it?

A ninja spins a slingshot with a 0.6kg stone in it. The slingshot is 1.3m long and makes one rotation every 1.2s. What is the tension in the string?

SKATEBOARD LOOP SWITCH/BOB BURNQUIST

Loop of Death

A skateboarder goes through a loop with a radius of 1.7m. If he does not want to fall from the top, what is the maximum time that he can spend making 1 revolution?

An angry carny turns the carousel up so that is rotates at 20 rpm. If a ___kg girl sits ___m from the center, what is the force that she holds onto the horse so she is not thrown from the ride?

A _____kg ant is inside of a barrel with a radius of ___m. If the barrel rotates every __ seconds, what is the normal force on the and at the top and bottom of the barrel?

A 90kg person gets on the gravitron with a radius of 6.5m. If the coefficient of friction is 0.6, what speed does the ship need to be moving in order for the rider not to slip?