A rider on a Ferris wheel completes one circle every second. What centripetal acceleration does the rider feel?

(r/t\*2Pi)^2 / r

A meter radius disk is rotating at rads. A disk that is not rotating is dropped exactly on top of the first disk and after a few moments, they rotate at the same rate. What is their final angular velocity?

I1ωi=(I1+I2)ωf

I = 1/2MR^2

Angular momentum of a aluminum rod at rads about its **one end**

1/3ML^2\*rads

RKE of a metal ring with a radius rolling without slipping along the floor at v

.5MV^2

What Is the moment of inertia of a metal disk that is **rotating around a point on its outer edge?**

.5MR^2 + MR^2

A flywheel going rads accelerates as it turns radians. Angular velocity?

Vf^2 = vo^2 + 2ax

A grinding wheel in diameter runs at rpm. Angular velocity in rads?

RPM/60 \* 2Pi

An airplane motor delivers Nm of torque to a kg propeller in meters in total length. Angular acceleration of the propeller?

A = F / (1/12ML^2)

The correct answer is: = m ω2 r → centripetal force, using angular terms., = ω / 2 π → frequency, = (v2 / r) → centripetal acceleration, using linear terms, = Fr sinΘ → torque, using linear motion terms, = iω → angular momentum, = iα → torque, using angular motion terms, = τ t → change in angular momentum, = (1/2) i ω2 → rotational kinetic energy

 α → a, L   → ρ,  τ  → F, Θ → x, i → m, ω → v