RKE of a solid disk with a radius rolling without slipping along the floor at v?

.25MV^2

RKE of a hollow ball with a radius rolling without slipping at v?

.333MV^2

Beam rotates about an axis 1/3 of its length in from one end. If the total length of the beam is m, what is the moment of inertia about the axis?

M(L/6) ^2 + 1/12ML^2

A modern windmill has 3 blades, each with a mass of kg. Under normal winds, the tip of each blade is moving mps, RKE in total?

3\*(1/2(1/3ML^2)(v/r)^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

Moment of inertia of a metal disk that is rotating **around an axis parallel to its center**

.5MR^2 + M(3R)^2

A small spherical asteroid with a diameter of m completes rpm

(.4M(D/2)^2)(rpm \*2Pi /60)

RKE of space ships with a meter cable holding them together as they rotate around each other is space

(((M(L/2)^2)\*2)\*(rpm\*2Pi/60))\*(rpm\*2Pi/60))

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

.5MV^2

A modern windmill, angular momentum total?

3\*(1/3ML^2)(V/L)

Angular momentum of a aluminum rod at rads about its **center**

1/12ML^2\*rads

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

1/3ML^2\*rads