

COMMON MOMENTS OF INERTIA:

Ring or Point:
(or Hoop)



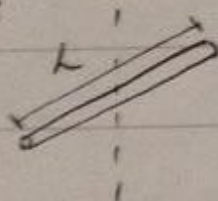
$$I = mr^2$$

Solid Cylinder/Disc:

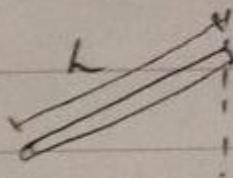


$$I = \frac{1}{2}mr^2$$

Solid Rod:



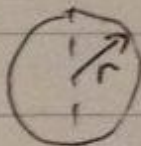
$$I = \frac{1}{12}mL^2$$



$$I = \frac{1}{3}mL^2$$

Sphere:

- Solid:



$$I = \frac{2}{5}mr^2$$

- Hollow:



$$I = \frac{2}{3}mr^2$$