

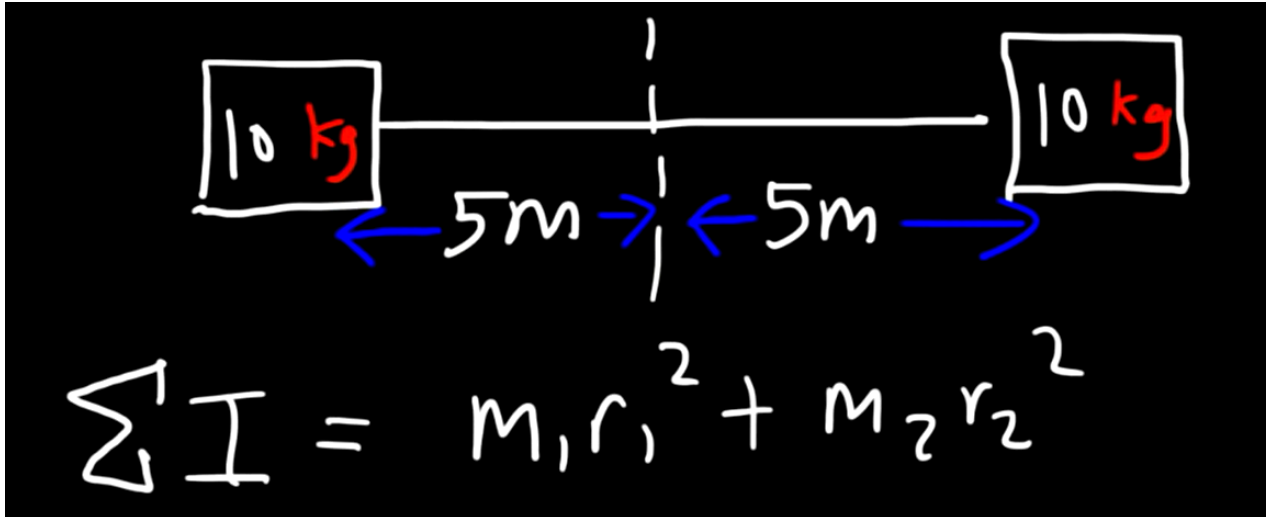
L16_Parallel Axis Theorem and Torque

✓ SP-check

Parallel Axis Theorem

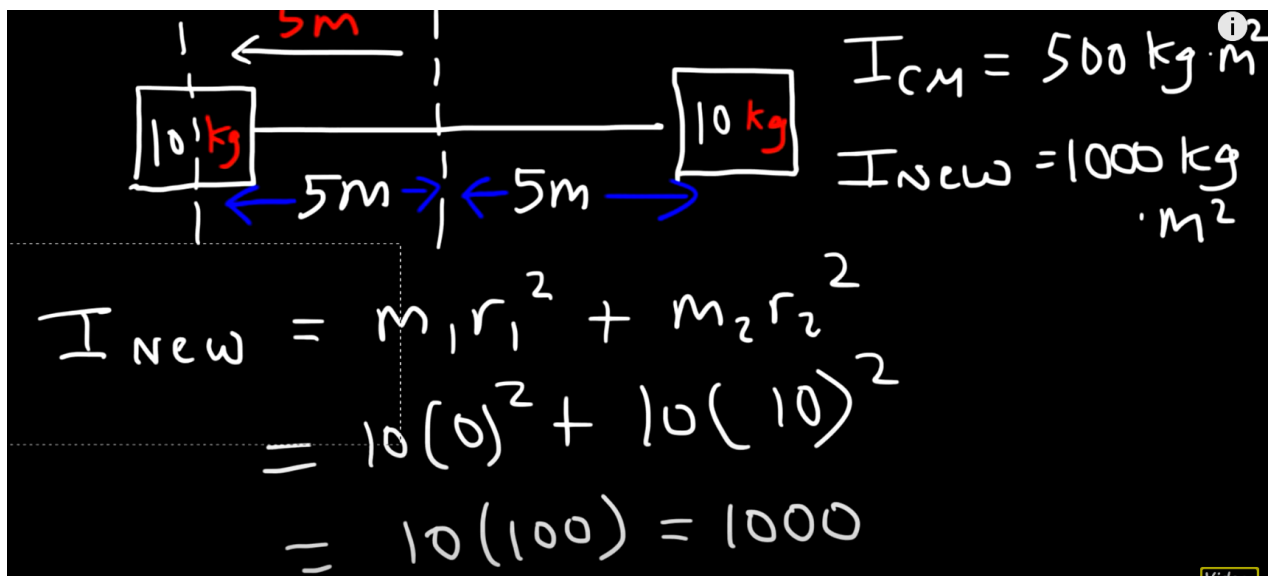
Lead-in :Two masses/ hoop

- Axis is the center of the masses



物理笔记/Mid3/images/image.png

- Move the axis



物理笔记/Mid3/images/image-1.png

Formula for Parallel Axis Theorem

$I_{\text{new}} = I_{\text{cm}} + Md^2$ here I_{cm} is the moment of inertia when the axis is at the c

$a_t = r\alpha$

2.Radialcomponent : 径向分量

$$a_r = r\omega^2$$

Right Hand Rule   ## Machine (Seesaw/Shovel) and M

$$IMA = \frac{\text{input lever arm}}{\text{output lever arm}}$$

 - Shovel  ## Relation with acceleration - $\tau = I\alpha$