

Topic

Principle of Angular Impulse and Momentum

Governing Equations and Assumptions

$$\vec{H}_1 + \sum \int \vec{M} dt = \vec{H}_2$$

Principle of Linear Impulse and Momentum

Kinematics

$$H = d_{\perp} m v$$

$$\vec{H} = \vec{r} \times m \vec{v}$$

Process

- ① Calculate the initial Angular momentum
- ② Calculate the Angular Impulses
- ③ Calculate the final angular momentum
- ④ If necessary, apply Kinematics, Linear Impulse and Momentum, etc, and solve for the unknown(s)