Summary: Angular impulse/momentum equation 2

force F acts directly toward point O

FUNDAMENTAL equation:

$$(\vec{H}_{O})_{2} = (\vec{H}_{O})_{1} + \int_{1}^{2} \sum_{n} \vec{M}_{O} dn$$

where O is a <u>FIXED</u> point.

WHEN should I use this equation? Think <u>central-</u> <u>force problems</u>... When $\sum \vec{M}_{O} = \vec{0}$, angular momentum about O is conserved.





IMPORTANT: This equation can NOT give information on the radial component of velocity for the particle. Why? Why is this important? Look at the above equation for computing angular momentum. Typically, use work/energy for the additional equation.

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