

# SiQuENC: Angular impulse-momentum theorem (calc.-based)

## Neatly and graphically represent situation(s)

Carefully read the problem three times.

For each situation, draw object(s) and relevant aspects of environment.

use dashed bubble(s) to indicate object(s) in system.

indicate axis of rotation and positive sense of rotation.

Identify requested unknowns.

Illustration of **initial** situation

Illustration of **final** situation

## Graphically represent quantities and their relationships

### Bar chart

Initial ang. momenta & supplied ang. impulse

.....

.....

.....

### Bar chart

Final angular momenta

.....

.....

.....

## Identify relevant allowed starting point (in) equation(s)

$$\Sigma L_i + \int_{t=t_i}^{t=t_f} \left( \Sigma_{\text{EXT} \rightarrow \text{SYS}} \tau \right) dt = \Sigma L_f$$

Object	$L = I\omega$ (or $L_{\text{PARTICLE}} = \pm mvr_{\perp}$ )
1	
2	
3	Rotational impulse $\left( \Sigma_{\text{EXT}} \tau \right) \Delta t =$
$\Sigma$	

Object	$L = I\omega$ (or $L_{\text{PARTICLE}} = \pm mvr_{\perp}$ )
1	
2	
3	
$\Sigma$	

(Continue on separate sheet).

## Use numbered steps to show REASoNing

## Communicate