

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

## Neatly and graphically represent situation(s)

Carefully read the problem three times.

For each situation, draw system 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(s)

Initial angular momenta and externally supplied angular impulse

### Bar chart(s)

Final angular momenta

## Identify relevant allowed starting point equation(s)

$$\Sigma L_i + \left( \sum_{\substack{\text{EXT} \\ \text{ON SYS}}} \tau_{\text{AVG}} \right) \Delta t = \Sigma L_f$$

## Analyze

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

(Continue on separate sheet).

## Communicate