Example problem on IC and MA:

The linkage in figure shown has $L_1 = 124$, $L_2 = 30$, $L_3 = 92$, $L_4 = 36$, $L_5 = 46$ mm. $\theta_2 = 68.3^\circ$ in the xy coordinate system, which is at $-23.3^\circ$ in the XY coordinate system. The X component of $O_{2C}$ is 118 mm. Link 2 rotates at a constant velocity $\omega_2 = 0.33$ rd/s. For the position shown, find:

The velocity ratio $V_{p6}/V_{p3}$ and the mechanical advantage from link 2 to link 6.

a) Using velocity difference graphical method.

b) Using the IC graphical method
HW# 6

The linkage in figure shown has \( L_2 = 30 \), \( L_3 = 82 \), \( L_5 = 90 \text{ mm} \). \( \theta_2 = 24^\circ \) in the XY coordinate system. Link2 rotates at a constant velocity \( \omega_2 = 1 \text{ rd/s} \). For the position shown, find:

- The velocity ratio \( V_{P56}/V_{P23} \) and the mechanical advantage from link 2 to link 6.
  
  c) Using velocity difference graphical method.

  d) Using the IC graphical method.