

**FIGURE 3-33**

Approximate constant velocity, draglink driven slider-crank sixbar mechanism<sup>(22)</sup>

- 7-61 Find the acceleration of the slider in Figure 3-33 for the position shown if  $\theta_2 = 110^\circ$  with respect to the global X-axis assuming a constant  $\omega_2 = 1$  rad/sec CW.

- Using a graphical method.
- Using an analytical method.

- †7-62 Write a computer program or use an equation solver such as *Mathcad*, *Matlab*, or *TKSolver* to calculate and plot the angular acceleration of link 4 and the linear acceleration of slider 6 in the sixbar slider crank linkage of Figure 3-33 as a function of the angle of input link 2 for a constant  $\omega_2 = 1$  rad/sec CW. Plot  $A_c$  both as a function of  $\theta_2$  and separately as a function of slider position as shown in the figure.

† These problems are suited to solution using *Mathcad*, *Matlab*, or *TKSolver* equation solver programs.