

$$3.2 \quad M=0, \Lambda_{hc}=0, K_0=1$$

$\beta=1$ Eq. (3.30) becomes

$$C_{L\alpha} = \frac{\pi A}{1 + \sqrt{1 + (A/2)^2}}$$

$$(A/2)^2 \gg 1 \text{ or } A \gg 2$$

$$C_{L\alpha} = \frac{\pi A}{1 + \frac{A}{2}} = \frac{2\pi A}{2 + A}$$

For $A = \infty$ (2D wing or airfoil)

$$C_{L\alpha} = 2\pi$$

which is the theoretical result.

