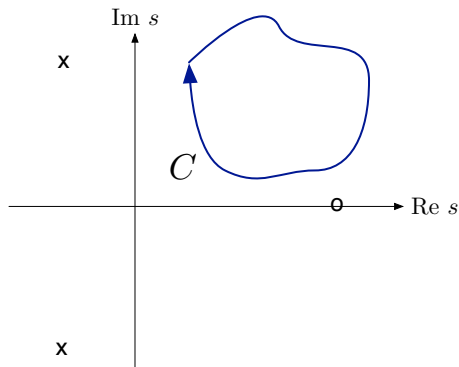


### Case 3: Contour Encircles No Poles or Zeros

Suppose that  $C$  is a closed,  $\circlearrowright$ -oriented contour in  $\mathbb{C}$  that does not encircle any poles or zeros of  $H(s)$ :



How does  $\angle H(s)$  change as we go around  $C$ ?