

FIGURE 2.1

Comparison of the streamline through the point $(1, 1)$ at $t = 0$ with the pathline of a particle that passed through the point $(1, 1)$ at $t = 0$ and the streakline through the point $(1, 1)$ at $t = 0$ for the flow field $u = x(1 + 2t)$, $v = y$, $w = 0$.

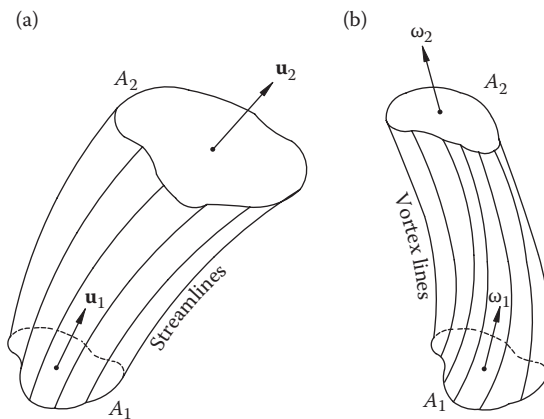


FIGURE 2.2

(a) Stream tube and (b) vortex tube subtended by a contour of area A_1 in a flow field.