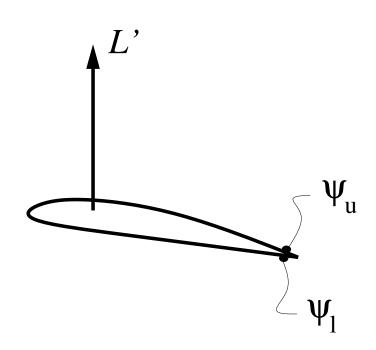
What must be true about the difference  $\psi_{\mathbf{u}} - \psi_{\mathbf{l}}$  at the two surface points at the trailing edge of a lifting airfoil?

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$$\psi_{\mathbf{u}} - \psi_{\mathbf{l}} < \mathbf{0}$$

$$2. \quad \psi_{\mathbf{u}} - \psi_{\mathbf{l}} = \mathbf{0}$$

3. 
$$\psi_{\mathbf{u}} - \psi_{\mathbf{l}} > \mathbf{0}$$

4. No way to know for sure from given information



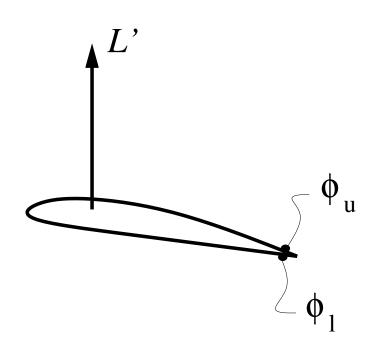
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If  $D\xi/Dt = 0$  in a steady inviscid flow, what must be strictly true about the  $\xi(\mathbf{x}, \mathbf{y})$  field?

- 1.  $\xi = 0$  everywhere
- 2.  $\xi = 0$  along any streamline
- 3.  $\xi = \text{const.}$  everywhere
- 4.  $\xi = \text{const.}$  along any streamline

A source of strength  $\Lambda$  is in a uniform flow  $V_{\infty}$ . What is the spacing height h of the dividing streamlines infinitely far downstream?

- 1. h = 0
- 2.  $\mathbf{h} = \mathbf{\Lambda}/\mathbf{V}_{\!\!\infty}$
- 3.  $\mathbf{h} = 2\Lambda/\mathbf{V}_{\!\!\infty}$
- 4.  $h=\infty$
- 5. Cannot be determined from given information

