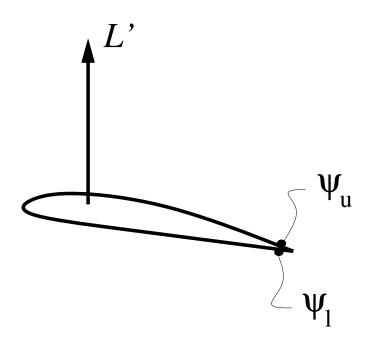
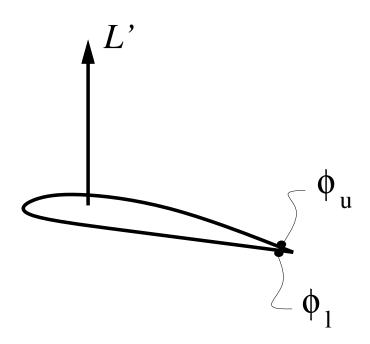
What must be true about the difference $\psi_{\mathbf{u}} - \psi_{\mathbf{l}}$ at the two surface points at the trailing edge of a lifting airfoil?

- 1. $\psi_{\mathbf{u}} \psi_{\mathbf{l}} < \mathbf{0}$
- $2. \quad \psi_{\mathbf{u}} \psi_{\mathbf{l}} = \mathbf{0}$
- $3. \quad \psi_{\mathbf{u}} \psi_{\mathbf{l}} > \mathbf{0}$
- 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 Λ is in a uniform flow V_{∞} . 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. $\mathbf{h} = \infty$
- 5. Cannot be determined from given information

