

**AE339: High-speed aerodynamics**  
**Tutorial 5**

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1. What is the value of the pressure coefficient  $C_p$  at a stagnation point when (a)  $M_\infty = 0.7$  and (b)  $M_\infty \rightarrow \infty$  for  $\gamma = 1.4$ ?
2. A rectangular wing with a NACA 0006 airfoil section having an aspect ratio of 3.5 is flying at  $M_\infty = 0.85$  at a height of 12 *km*. What is the airfoil section and the aspect ratio for an equivalent wing in an incompressible flow?