AA200A Homework 7 2014 -2015
Due Thursday May 28

Read: Chapters 12 and 13

Problem 1 – Take the 2-D wing you studied in Homework 6 and use it as the cross-section of an elliptical planform 3-D wing with aspect ratio 10. Determine the lift, skin friction drag, induced drag and moment coefficients of the wing for several angles of attack. Ignore possible cross-flow effects.

Problem 2 – Estimate the effect on the pressure distribution and lift if the wing in problem 1 is flown at a Mach number of 0.5.