

(EXAMPLE) [C-1-2]

A model wing of constant chord length is placed in a low speed subsonic wind tunnel, spanning across the test section (this is called, a quasi-2-D test). The wing has a NACA 4412 airfoil and a chord length of 1.0 m. The test section airspeed is 44 m/s at standard sea-level condition. If the wing is at 2 degrees angle of attack, determine:

- (a) c_l , c_d , and $c_{m,c/4}$
- (b) the lift, the drag, and the moment about the quarter chord (per unit span)



