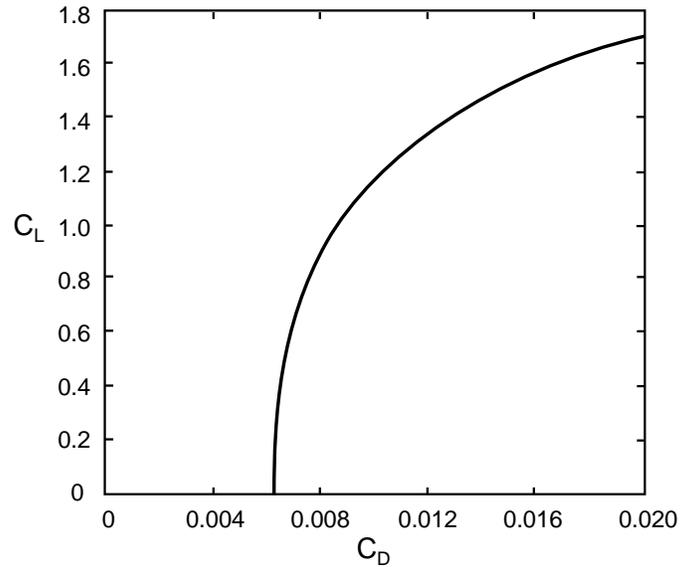


Problem 292D

A glider is equipped with wings that have the lift/drag characteristic (where the lift and drag coefficients, C_L and C_D , are based on the planform area of the wings) shown in the figure below. The additional drag on the rest of the glider amounts to an additional drag coefficient (also based on the wing planform area) of 0.02.



The inclination of the trajectory of the glider to the horizontal is called the glide angle. Find the minimum glide angle of the glider.