

10-86E Air at 70°F flows parallel to a smooth, thin, flat plate at 15.5 ft/s. The plate is 10.6 ft long. Determine whether the boundary layer on the plate is most likely laminar, turbulent, or somewhere in between (transitional). Compare the boundary layer thickness at the end of the plate for two cases: (a) the boundary layer is laminar everywhere, and (b) the boundary layer is turbulent everywhere. Discuss.