

Teaching and Learning Objectives -- Lift & Drag

1. Define, Illustrate, and Compare and Contrast the following terms and concepts:

- External vs. Internal flow

- Bluff (Blunt) vs. Streamlined Body

 - Flow separation

 - Angle of attack

- Drag force

 - Skin friction drag vs. Pressure (form) drag

 - Drag coefficient

 - Frontal area

 - Terminal velocity

 - Streamlining

- Lift force

 - Lift coefficient

 - Planform area

 - Minimum flight speed

2. Given sufficient information, determine the drag force for external flow over a body.
3. Given sufficient information, determine the lift force for external flow over a body