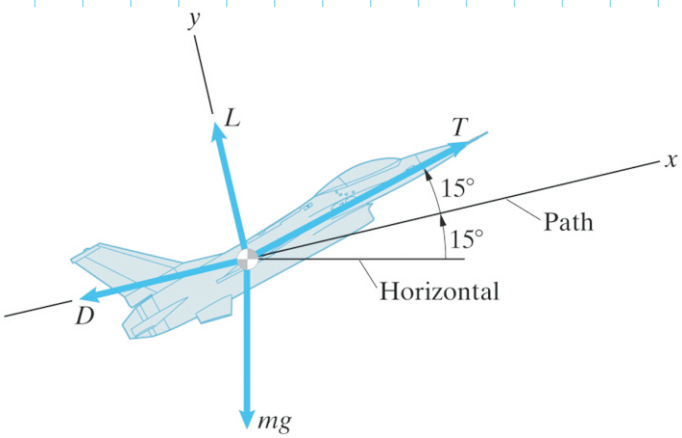
Name

Date

Week: _____ **Problem:** _____

Given:

At the instant shown, the 11,000-kg airplane's velocity is $\mathbf{v} = 300\mathbf{i}$ (m/s). The rate of change of the magnitude of the velocity is $dv/dt = 5$ m/s^2. The radius of curvature of the airplane's path is 4500 m, and the y axis points toward the concave side of the path. The thrust is $T = 120{,}000$ N. Determine the lift L and drag D.



Required:

Solution: