# Given Parameters

Area = 174 $ft^2$

Span = 35.8 ft

$C_{Do}$ = 0.025

Propeller efficiency (η) = 0.8

Fuel Capacity = 65 gal

Fuel consumption = 0.45 Ib/(hp)(h)

Oswald efficiency factor (e) = 0.8

$C_{Lmax}$ = 1.51

Power of one piston = 230 HP

Gross weight (Wo) = 2950 Ib

Velocity of aircraft = 200 ft/s

Gliding height ($h_{gliding}$) = 1e4 ft