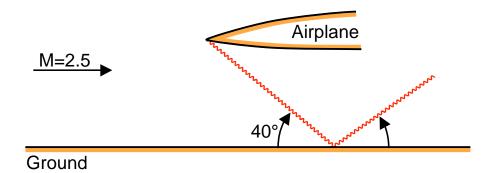## Problem 354B

A supersonic airplane flying close to the ground produces a weak oblique shock inclined at an angle of $40°$ to the flat ground:

If the airplane is travelling at a Mach number, $M = 2.5$, find:

1. The inclination, ϕ, of the reflected shock.

2. The Mach number of the flow downstream of the reflected shock.