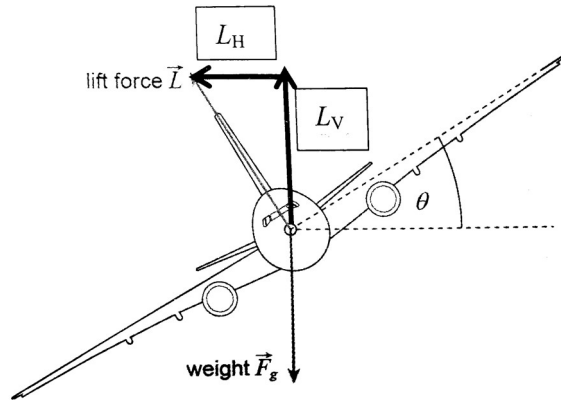


3. (a) The weight of the truck causes a normal force at an angle to the vertical. This normal force has a component that is horizontal, which is directed towards the centre of the circle. This provides some of the force causing centripetal acceleration.

4. (a)(i)



(ii) The horizontal component of the lift force is perpendicular to the velocity of the aeroplane, so it causes the direction of travel to change but not the speed. This the force causes a centripetal acceleration, resulting in uniform circular motion.