

Airplane Banking Turn Notes

1. Draw a force diagram for a banking turn airplane.
2. An airplane makes a banked turn such that its wings tilt creating a 26 degree angle between the vertical and the lift force on the plane. The plane has mass 2000 kg is near the earth's surface where $g = 10 \text{ m/s/s}$. What is the magnitude of force gravity in Newtons on the plane?
3. An airplane makes a banked turn such that its wings tilt creating a 26 degree angle between the vertical and the lift force on the plane. The plane has mass 2000 kg is near the earth's surface where $g = 10 \text{ m/s/s}$. What is the magnitude of centripetal force in Newtons on the plane?
4. An airplane makes a banked turn such that its wings tilt creating a 26 degree angle between the vertical and the lift force on the plane. The plane has mass 2000 kg is near the earth's surface where $g = 10 \text{ m/s/s}$. What is the magnitude of the lift force in Newtons on the plane?