8. Airplanes (7 points) — *Janis Huns, Jaan Kalda.*

Two airplanes pass each other while flying at a constant altitudes. While they have identical airspeeds, their ground speeds are v_1 and v_2, respectively, and the angle between the velocity vectors is α. Based on this knowledge, what is the minimal possible value

i) *(1 point)* of the airspeed of the planes;

ii) *(3 points)*of the wind speed at the altitudes of the planes?

iii) *(3 points)* Answer the question ii) if now $v_1 = v_2 = v$, but it is known that the airspeed of one of the planes is two times bigger than that of the other.