Air streams horizontally past an air plane .The speed over the top surface is 60 m/s and that under the bottom surface is 45 m/s .the density of air is 1.293 kg /m cube. Then he difference in pressure is?

Bernoulli's principle can be expressed as a mathematical equation:

$$\frac{v^2}{2} + gh + \frac{p}{\rho} = const$$

where v is the air streams speed, g is the acceleration due to gravity,

h is the height, p is the pressure, and ρ is the density of the air.

In our case:

$$\frac{v_t^2}{2} + \frac{p_t}{\rho} = \frac{v_b^2}{2} + \frac{p_b}{\rho}$$

v_t, v_b – speeds over the top and that under the bottom surfaces, p_t, p_b – pressures over the top and that under the bottom surfaces.

$$p_b - p_t = \frac{\rho}{2}(v_t^2 - v_b^2) = \frac{1.293\frac{kg}{m^3}}{2}(60^2 - 45^2)\frac{m^2}{s^2} = 1018\ Pa$$

Answer: $1018\ Pa$