

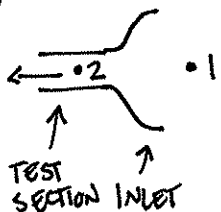
The wind tunnel in the Krieger basement lab had holes in it to allow access for the Pitot probe you used. When the tunnel flow is on, does air flow into or out of the tunnel through those holes? Explain your answer briefly.

- STATIC PRESSURE INSIDE TUNNEL IS LOWER THAN PRESSURE OUTSIDE →
e.g. BERNOULLI EQ.

(2) (BRIEF EXPLANATION SUFFICIENT)

$$\frac{P}{\rho} + \frac{V^2}{2} + gz = \text{CONST. ON A STREAMLINE IN STEADY, INCOMPRESSIBLE, INVISCID FLOW}$$

COMPARE



$$\frac{P_1}{\rho} + g z_1 = \frac{P_2}{\rho} + \frac{V_2^2}{2} + g z_2$$

(V₁ = 0)

$$\Rightarrow \frac{P_1 - P_2}{\rho} = \frac{V_2^2}{2} \Rightarrow \underline{P_1 > P_2}$$

- AIR FLOWS FROM HIGH TO LOW P → (2)
- AIR FLOWS INTO THE TUNNEL THROUGH THE HOLES IN THE TEST SECTION

(4)