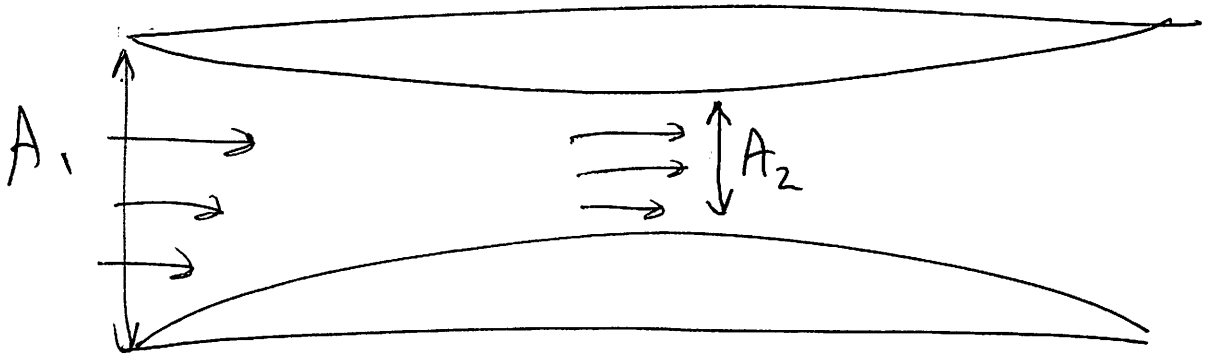
$$P_1 + \frac{1}{2}\rho V_1^2 + \cancel{\rho g h_1} = P_2 + \frac{1}{2}\rho V_2^2 + \cancel{\rho g h_2}$$



$$\text{flow} = A_1 V_1 = A_2 V_2$$

$$V_1 = \left(\frac{A_2 V_2}{A_1}\right)$$

Known
- A_1
- A_2
- P_1 - measured
- P_2 - measured

$$P_1 + \frac{1}{2}\rho\left(\frac{A_2 V_2}{A_1}\right)^2 = P_2 + \frac{1}{2}\rho V_2^2$$

- Solve for V_2 then plug into flow equation.
- Integrate over time to get volume.