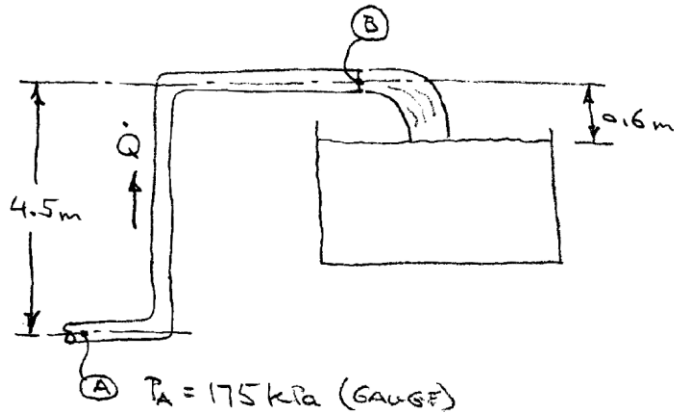


# Meng 263 – Fluids & Heat Transfer

## Class II Flow Systems – Tutorial Question

Find the flowrate in the system shown.



### PIPE

2" COPPER, TYPE K, 100 m LONG  
 $D = 49.76 \text{ mm}$  (APPENDIX K)

FLUID  $E = 1.5 \times 10^{-6} \text{ m}$  (T 9.1)

$$S_g = 0.93$$

$$\mu = 9.5 \times 10^{-3} \text{ Pa}\cdot\text{s}$$

$$\gamma = 0.93 \times 9.81 \text{ kN/m}^3 \rightarrow \text{APPENDIX A}$$
$$= 9.123 \text{ kN/m}^3$$

$$\rho = 0.93 \times 1000 \text{ kg/m}^3 \rightarrow$$
$$= 930 \text{ kg/m}^3$$