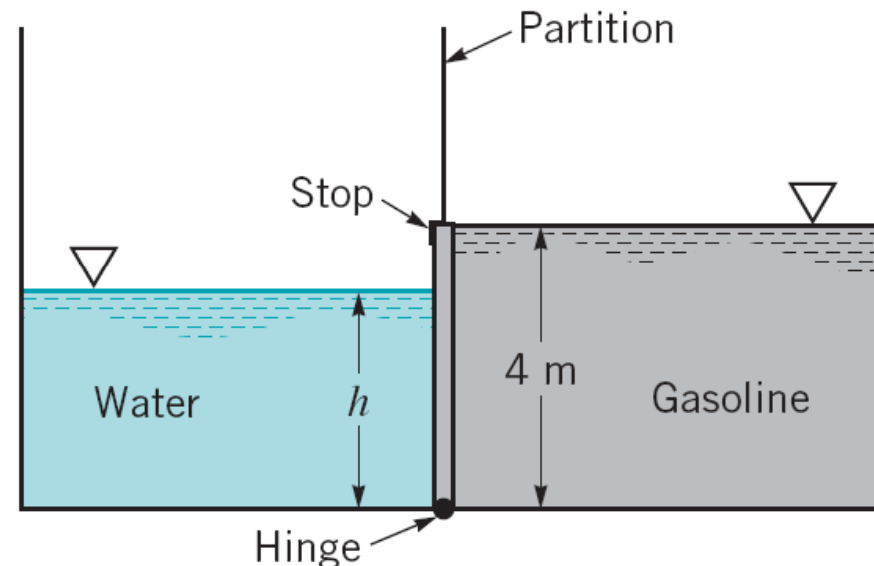
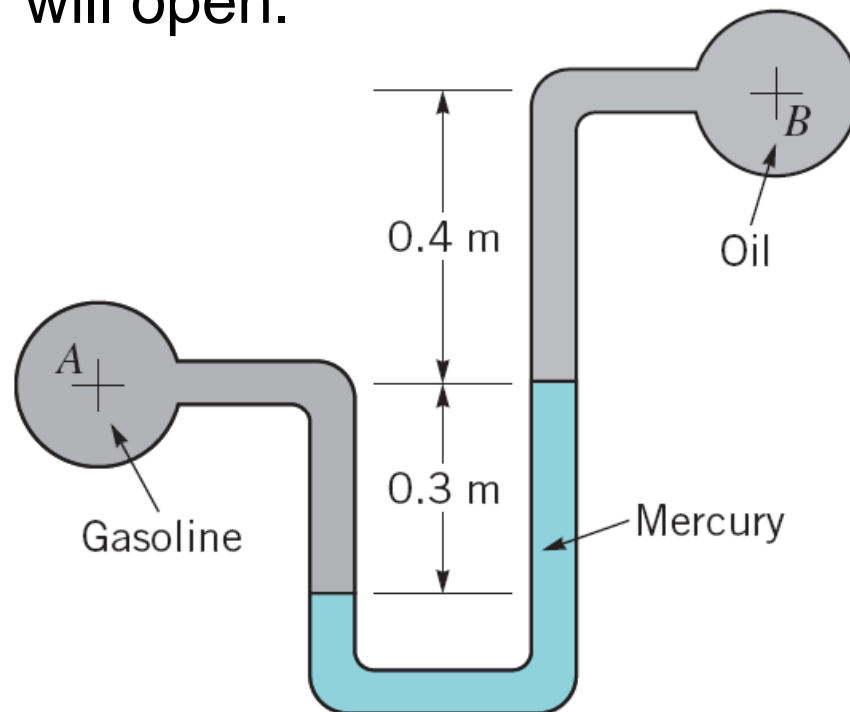


Probelms

- **2.24** Pipe A contains gasoline ($SG=0.7$), pipe B contains oil ($SG=0.9$). Determine new differential reading of pressure in A decreased by 25 kPa. The initial differential reading is 30cm as shown.
- **2.39** An open tank contains gasoline $\rho=700\text{kg/cm}$ at a depth of 4m. The gate is 4m high and 2m wide. Water is slowly added to the empty side of the tank. At what depth h the gate will open.



Problems

- **3.29** The circular stream of water from a faucet is observed to taper from a diameter 20 mm (at the faucet) down to 10 mm in a distance of 50 cm. Determine the flow rate.



- Water flows through a pipe contraction as shown below. Calculate flowrate as a function of smaller pipe diameter for both manometer configuration

