Archimedes' Principle

- Determine force of fluid on immersed cube
  - Draw FBD
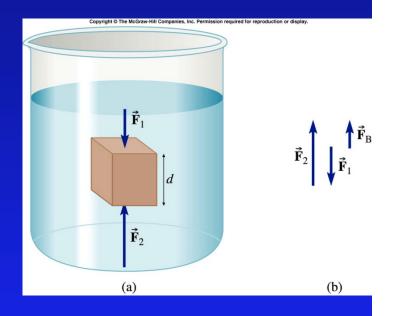   - $F_B = F_2 - F_1$
    - $= P_2\, A - P_1\, A$
    - $= (P_2 - P_1)A$
    - $= \rho\, g\, d\, A$
    - $= \rho\, g\, V$

- Buoyant force is weight of displaced fluid!