

Fluid Statics and Dynamics Help Page  
Winter '99-'20, Dr. C. S. Tritt

$$\tilde{n}_{\text{Hg}} = 13,600 \text{ kg/m}^3$$

$$\tilde{n}_{\text{H}_2\text{O}} = 1,000 \text{ kg/m}^3$$

$$1.00 \text{ Pa} = 1.00 \text{ N/m}^2 \text{ (by definition)}$$

$$1.00 \text{ atm} = 101 \text{ kPa}$$

$$g = 9.81 \text{ m/s}^2 = 32.17 \text{ ft/s}^2 \text{ (at the surface of the earth)}$$

$$g_c = 1.00 \text{ kg}\cdot\text{m}/(\text{s}^2\cdot\text{N}) = 32.17 \text{ lb}_m\cdot\text{ft}/(\text{s}^2\cdot\text{lb}_f)$$

$$1.00 \text{ lb}_m = 0.45359 \text{ kg}$$

$$1.00 \text{ lb}_f = 4.448 \text{ N}$$

$$1.00 \text{ ft} = 12.0 \text{ in} = 30.48 \text{ cm}$$