Useful Equations

interpolation: $y_m = y_1 + \frac{(y_2 - y_1)}{(x_2 - x_1)}(x_m - x_1)$

$\Delta P = \rho L g$

$PV = mRT$

$P\upsilon = RT$

$PV = n\overline{R}T$

$x = \frac{m_g}{m_f + m_g}$

$\upsilon = \upsilon_f + x\upsilon_{fg}$

$\upsilon_{fg} = \upsilon_g - \upsilon_f$

$V(sphere) = \frac{4}{3}\pi r^3$

$V(cylinder) = \pi r^2 h$

$\overline{\upsilon} \equiv \frac{V}{n}$

$\upsilon \equiv \frac{V}{m}$

$F = ma$

$F = \frac{ma}{g_c}$

$^oF = \frac{9}{5}\,^oC + 32$

$K = \,^oC + 273$

$^oR = \,^oF + 460$

$g_c = 32.174 \frac{lbm\ ft}{lbf\ s^2}$