

Equation Sheet for Exam 1

$$a = 2R\sqrt{2} \quad a = \frac{4R}{\sqrt{3}} \quad a = 2R$$

$$APF = \frac{V_s}{V_c} \quad N_A = 6.023 \times 10^{23} \text{ atoms/mol}$$

$$V_c = 16R^3\sqrt{2} \quad V_c = \frac{64R^3}{3\sqrt{3}} \quad V_c = 6R^2c\sqrt{3} \quad \rho = \frac{nA}{V_c N_A}$$

$$\%IC = \{1 - \exp[-(0.25)(X_A - X_B)^2]\} \times 100$$

$$\overline{DP} = \frac{MW_{polymer}}{MW_{mer}}$$

$$\overline{M}_n = \frac{\sum w_i}{\sum N_i} = \frac{\sum N_i M_i}{\sum N_i}$$

$$\overline{M}_w = \frac{\sum w_i M_i}{\sum w_i} = \frac{\sum N_i M_i^2}{\sum N_i M_i}$$

You need to know equation for PDI