

HOMEWORK # 5

BIOL/CHEM 5312

due Friday, March 27, 2015

van Holde, Johnson, & Ho Chapter 5, p. 270–274

problems **5.0, 5.1, 5.2, 5.5, 5.8, 5.9, 5.15, 5.17, 5.18, 5.19**

5.0. Verify the Results of Table 5.4, page 234.

Remember to plot your data (e.g. 5.2, 5.15, 5.17, 5.19) if appropriate

Notes:

5.5a plot $\ln[r(t)/r(t_0)]$ vs time and determine the slope

5.5b use equation 5.26

5.5c calculate f_0 from R_s , then calculate f from equation 5.15

5.8de use the equation: $f/f_0 = f/f_{sp} \times f_{sp}/f_0$

in part d, assume that f/f_{sp} is one and that f_{sp}/f_0 is of the form $(1 + \delta)^{1/3}$, solve for δ

in part e, assume that f_{sp}/f_0 is $(1 + .2)^{1/3}$, and look up in Figure 5.7 or in handout

5.15 use Equation 5.42a