

HOMEWORK # 7

BIOL/CHEM 5312

due Friday, April 17, 2015

van Holde, Johnson, & Ho Chapter 14, p. 654–657

problems **14.1, 14.4, 14.5, 14.7, 14.8, 14.9, 14.15, 14.16**

14.0 Extra Problem:

Plot the following data in a Scatchard plot, assuming two classes of independent binding sites where $n_1 = 1$ and $n_2 = 1$. Find the affinities for each site.

v	$[A] \mu\text{M}$
0.1	0.00496
0.2	0.0109
0.3	0.0182
0.4	0.0273
0.5	0.0390
0.6	0.0546
1.0	0.200
1.5	0.826
1.6	1.010
1.7	1.56
1.8	2.47
1.9	5.21

Notes:

14.7 You will need to find K_{24} in terms of K_{14} and K_{12} . There will be only three data points in the end for each equation. My answers are approximately the same as the book's solution.

14.9 Plot the data and find the steepest slope.