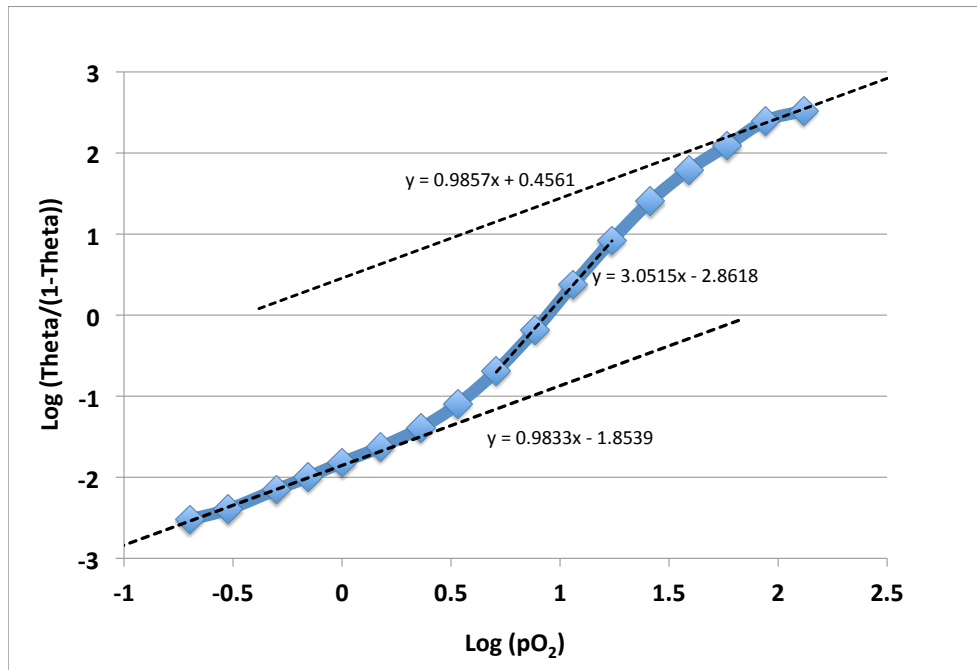


Namw: _____

Quiz 22

Below is an actual Hill plot for oxygen binding to purified Hb:



- 1) How does the actual Hb data compare to the completely cooperative model for 4 binding sites? How does it compare to the non-cooperative binding model for Mb?
- 2) At low oxygen pressure, what observation in the actual Hill graph supports that Hb acts non-cooperatively in the T-state?
- 3) Determine the association binding constant for the T-state (called K_{site}^T).
- 4) At high oxygen pressure, what observation in the actual Hill graph supports that Hb acts non-cooperatively in the R-state?
- 5) Determine the association binding constant for the R-state (called K_{site}^R).