NAME: _____

Imagine that you collect the following data for a protein with three binding sites:

Plot: y-axis labeled $\log(\text{Theta}/(1-\text{Theta}))$ ranging from -8 to 6; x-axis labeled log [Ligand] (nM) ranging from 0 to 3.5. Line equation: $y = 3.4x - 6.507$
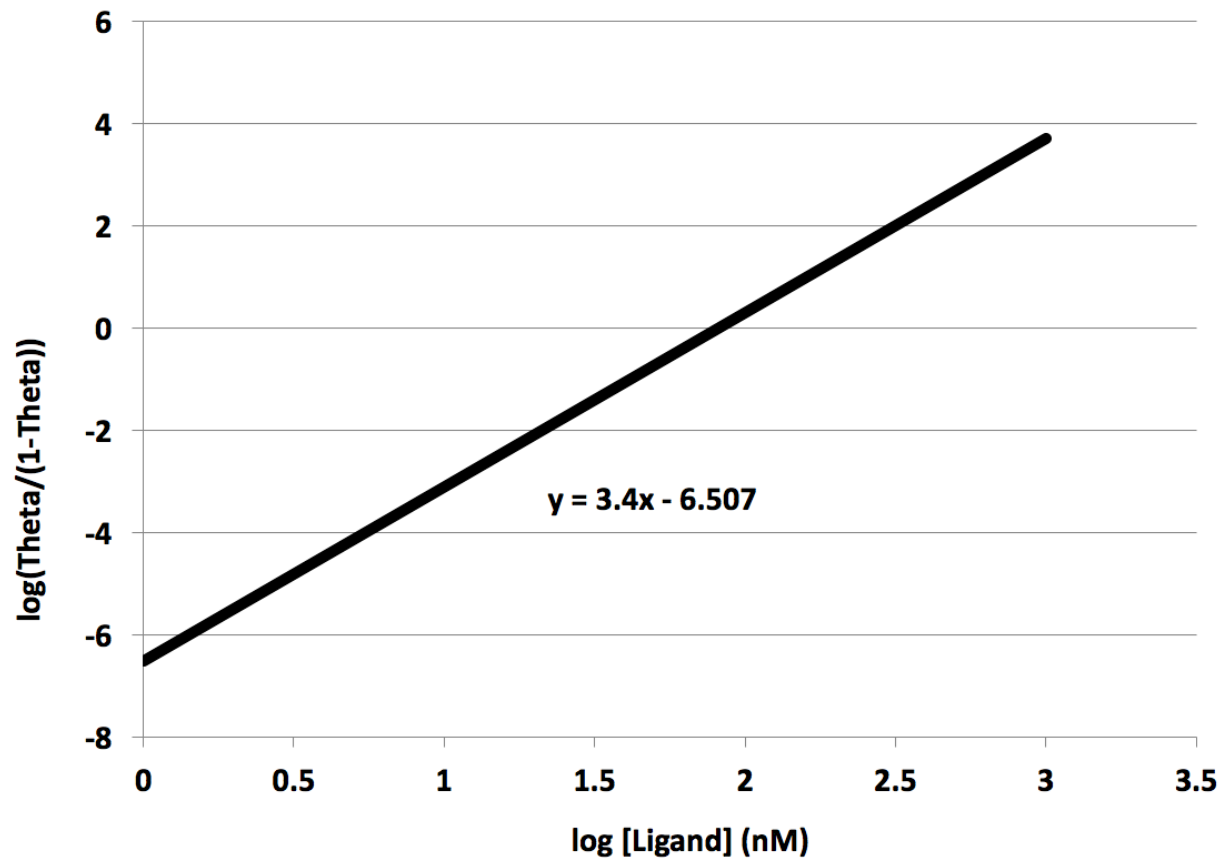
1. Is the ligand binding process cooperative or non-cooperative? How do you know?

2. What is the Hill coefficient for this binding process?

3. What is the L_{50} for this binding process?

4. What is the K_D for this binding process?