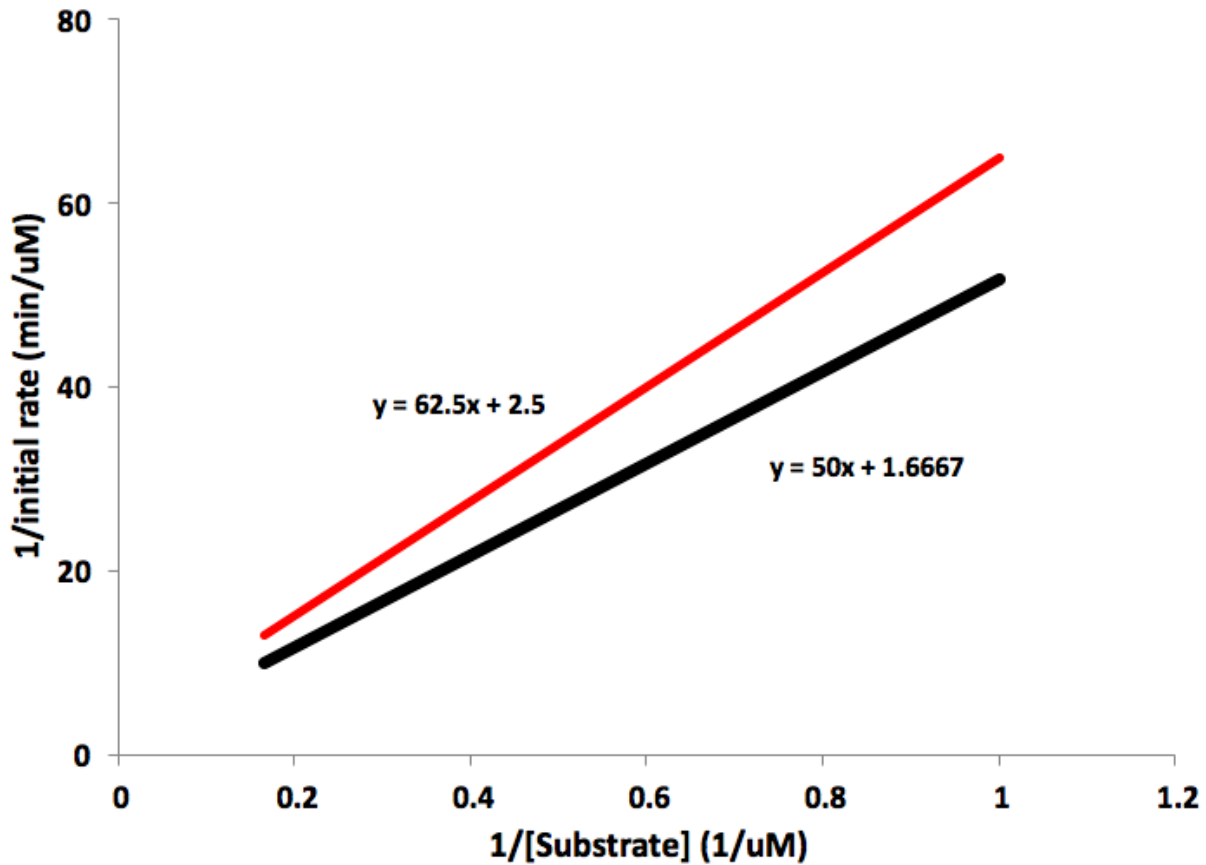


Imagine that you collect the following kinetic data in the absence of inhibitor (black line) and in the presence of 5 mM inhibitor (red line).



1. Does the inhibitor bind to the free enzyme, the enzyme-substrate complex, or both the free enzyme and the enzyme-substrate complex?
2. Calculate the equilibrium dissociation constant for the inhibitor to free enzyme and/or enzyme-substrate complex as indicated in question #1? Include units.