Name: _____

Imagine that you collect the following data presented in a Lineweaver-Burk plot.

20 mM Inhibitor
$y = 3.5714x + 0.1429$

$y = 1.2857x + 0.1429$
0 mM Inhibitor

Y-axis: 1/(initial rate) (min/mM)
X-axis: 1/[Initial Substrate] (1/mM)
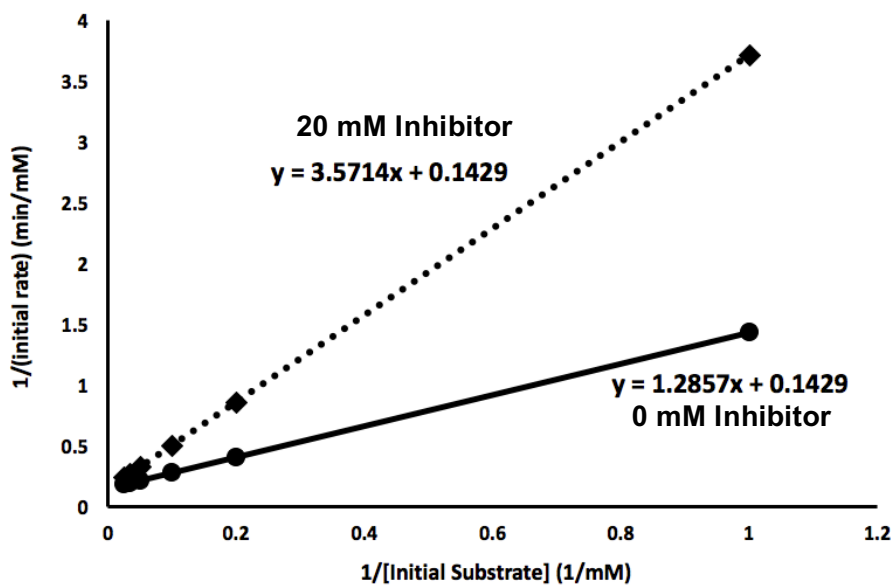
1. Determine the value for V_{max} with units in the absence and presence of inhibitor.

2. If the total enzyme concentration is 2.0 µM, what is the value of k_2 with units in the absence and presence of inhibitor?

3. Determine the value of K_M with units in the absence and presence of inhibitor.

4. Determine the value of K_I with units.