Preclass Assignment CHEM 1100-General Chemistry II

Name:

Section: 31, TR

Due Date: Tuesday 2/4/2020

1. At room temperature, the following data was collected for the reaction between acetone and bromine. Determine the rate law and calculate the rate constant:

Trial	Initial [C ₃ H ₆ O]	Initial [Br ₂]	Initial Rate M/s
1	0.130	0.225	2.13 x 10 ⁻⁵
2	0.050	0.225	8.20 x 10 ⁻⁶
3	0.130	0.550	2.13 x 10 ⁻⁵

 $C_{3}H_{6}O(aq) + Br_{2}(aq) \rightarrow C_{3}H_{5}OBr(aq) + HBr(aq)$