

# Participation Assignment

## CHEM 1100-General Chemistry II

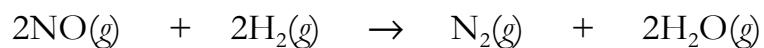
Name:

#4

Section: 31, TR

Due Date: Tuesday 4/10/2018

1. At 1280 °C, the following data was collected for the reaction between nitrogen monoxide and hydrogen gases. Determine the rate law and calculate the rate constant:



Trial	Initial [NO]	Initial [H <sub>2</sub> ]	Initial Rate M/s
1	$5.0 \times 10^{-3}$	$2.0 \times 10^{-3}$	$1.3 \times 10^{-5}$
2	$1.00 \times 10^{-2}$	$2.0 \times 10^{-3}$	$5.2 \times 10^{-5}$
3	$1.00 \times 10^{-2}$	$4.0 \times 10^{-3}$	$1.0 \times 10^{-4}$