Marks
4

- The following data were obtained for the reaction between gaseous nitric oxide and hydrogen at 1280 °C.

$$2NO(g) + 2H_2(g) \rightarrow N_2(g) + 2H_2O(g)$$

Experiment number	INITIAL [NO] (M)	INITIAL [H_2] (M)	INITIAL REACTION RATE (M min^{-1})
1	5.0×10^{-3}	2.0×10^{-3}	1.3×10^{-5}
2	1.0×10^{-2}	2.0×10^{-3}	5.0×10^{-5}
3	1.0×10^{-2}	4.0×10^{-3}	1.0×10^{-4}

Deduce the rate law for this reaction and calculate the value of the rate constant.

RATE LAW	RATE CONSTANT
Answer:	Answer:

THE REMAINDER OF THIS PAGE IS FOR ROUGH WORKING ONLY.