• At a certain temperature the following data were collected for the reaction shown.

Marks 4

2IC1	+	Η2	\rightarrow	I_2	+	2HCl
2101		112		12		21101

Experiment	Initial [ICl] (mol L ⁻¹)	Initial [H ₂] (mol L ⁻¹)	Rate of formation of $[I_2]$ $(\text{mol } L^{-1} \text{ s}^{-1})$
1	0.10	0.10	0.0015
2	0.20	0.10	0.0030
3	0.10	0.050	0.00075

Determine the rate law for the reaction.

What is the value of the rate constant?				
	Answer:			

THE REMAINDER OF THIS PAGE IS FOR ROUGH WORKING ONLY.