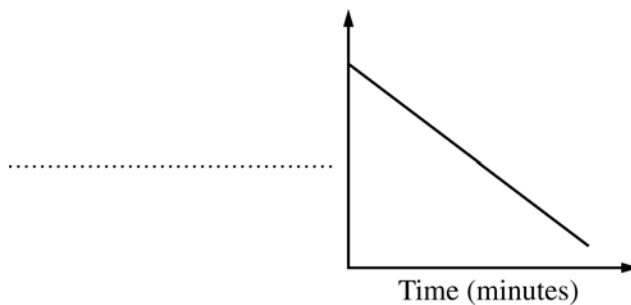


2005 AP[®] CHEMISTRY FREE-RESPONSE QUESTIONS

(c) During the analysis of the data, the graph below was produced.



- (i) Label the vertical axis of the graph.
- (ii) What are the units of the rate constant, k , for the decomposition of $\text{H}_2\text{O}_2(aq)$?
- (iii) On the graph, draw the line that represents the plot of the uncatalyzed first-order decomposition of $1.00\text{ M } \text{H}_2\text{O}_2(aq)$.

S T O P

**If you finish before time is called, you may check your work on this part only.
Do not turn to the other part of the test until you are told to do so.**