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|  | **Question** | **Steps** |
| **Sentence Format** | Ammonia (NH3) is produced by the reaction between nitrogen and hydrogen gases. The concentration of ammonia increases from 0.257 M to 0.815 M in 15.0 min. Calculate the average rate of reaction over this time interval. | |
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| **Chart Format** | Consider the reaction: P4 + 6 H2 → 4 PH3. A kinetics experiment was conducted and the following information was obtained. Calculate the rate of disappearance of H2 between times 20 and 40 seconds. | |
| |  |  | | --- | --- | | Time (sec) | [P4] | | 0 | 0.1 M | | 20 | 0.08 M | | 40 | 0.065 M | | 60 | 0.055 M | |  |
| **Graph Format** | The decomposition of BrO3- follows the following reaction: BrO3- + 5Br- + 6H+ 🡪 3Br2 + 3H2O What is the average rate between time 400 sec and 2000 sec? | |
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