

Potential Energy Diagrams

1. Consider the following potential energy diagram for the reaction $A + B \rightarrow P$



- How many reaction steps?
- How many intermediates?
- How many transition states?
- Which is the rate determining step?
- Which is the fastest step in the forward reaction?
- Which step has the smallest rate constant in the forward direction?
- Is the overall reaction endothermic or exothermic?
- What is the difference between an intermediate and a transition state?
- How many elementary reactions?