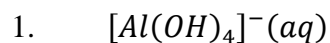
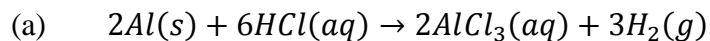


**Answers to Exercise 7.3**  
**Reactions of Aluminium and Aluminium Oxide**

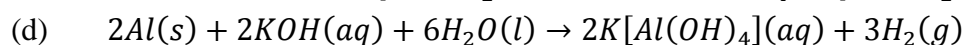
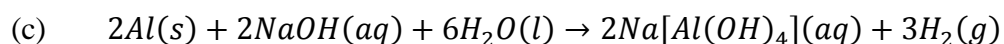


2.

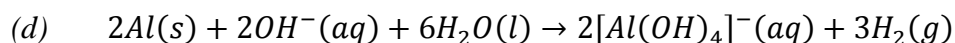
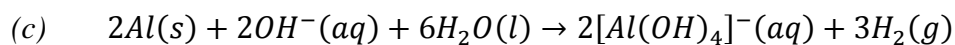
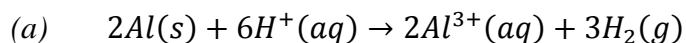


(b) no reaction

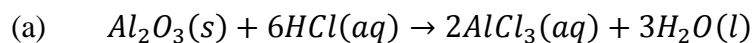
*HNO<sub>3</sub> is an oxidizing acid; as such, it cannot penetrate the passivation layer of Al<sub>2</sub>O<sub>3</sub> on the surface of the Al so there is no reaction*



*Net ionic equations are also acceptable:*

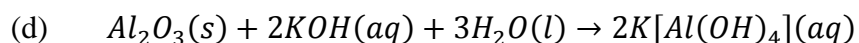
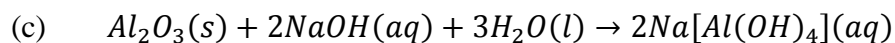


3.



(b) no reaction

*HNO<sub>3</sub> is an oxidizing acid*



*Net ionic equations are also acceptable:*

