

Complete the given Lewis structures and provide curved arrows for the proton-transfer reaction that occurs. Predict the products and determine the direction of the equilibrium (forward or reverse favored?). Explain briefly.



- A) **Reverse** reaction is favored. (-) charge on electronegative fluorine atom is more stable, making F^- a **weaker base** than Br^- .
- B) **Forward** reaction is favored. (-) charge on electronegative fluorine atom is more stable, making F^- a **weaker base** than Br^- .
- C) **Reverse** reaction is favored. (-) charge on larger bromine atom is more stable, making Br^- a **weaker base** than F^- .
- D) **Forward** reaction is favored. (-) charge on larger bromine atom is more stable, making Br^- a **weaker base** than F^- .