1. If BS is NP-Hard and JJ $\in$ P, then **P = NP**. Since we are able to reduce an NP-Hard problem to polynomial time, we can solve any problem in polynomial time and thus, state that P = NP. BB is Ω (JJ).

2. If BS $\in$ P and JJ is NP-Hard, then **we cannot determine** if P = NP. Since we are attempting to reduce a polynomial time algorithm using an NP-Hard time, this provides no meaning with regards to BS and thus, there is no way of knowing that P = NP.