1. $H_1 : \exists x (P(x) \wedge q(x))$
2. $H_2 : \forall x (q(x) \rightarrow r(x))$
3. $c : \exists x (P(x) \wedge r(x))$
4. $P(a) \wedge q(a)$ — Existential Instantiation from 1
5. $q(a) \rightarrow r(a)$ — Universal Instantiation from 2
6. $q(a)$ — Simplification from 4
7. $r(a)$ — MPP from 5 & 6
8. $P(a)$ — Simplification from 4
9. $P(a) \wedge r(a)$ — Conjunction from 7 & 8
10. $\exists (P(x) \wedge r(x))$ — Existential Generalization