| 1. 2. 3. 4. 5. 6. 7. 8. 9. | $\forall x[F(x) \rightarrow G(x)]$ $\forall x[G(x) \rightarrow H(x)]$ $\forall x[F(x)]$ $F(a)$ $F(a) \rightarrow G(a)$ $G(a)$ $G(a)$ $G(a) \rightarrow H(a)$ $H(a)$ $\exists x[H(x)]$ | Premise Premise Hypothesis ∀-elimination3 ∀-elimination1 →-elimination4,5 ∀-elimination2 →-elimination6,7 ∃-introduction8 | {1} {2} {3} {3} {1} {1,3} {2} {1,2,3} {1,2,3} |
|--|---|---|---|
| 9. 10. | | ∃-introduction8 →-introduction3,9 | {1,2,3} {1,2} |
| | | | |