1. $\exists x(A \wedge B) \vdash \exists xA \wedge \exists xB$
1 $\exists x(A \wedge B), A \wedge B \vdash A \wedge B$
2 $\exists x(A \wedge B), A \wedge B \vdash A$
3 $\exists x(A \wedge B), A \wedge B \vdash B$
4 $A \rightarrow \exists xA$
5 $\exists x(A \wedge B), A \wedge B \vdash \exists xA$
6 $B \rightarrow \exists xB$
7 $\exists x(A \wedge B), A \wedge B \vdash \exists xB$
8 $\exists x(A \wedge B), A \wedge B \vdash \exists xA \wedge \exists xB$
9 $\exists x(A \wedge B) \vdash \exists x(A \wedge B)$
10 $\exists x(A \wedge B) \vdash \exists xA \wedge \exists xB$