$$\frac{\exists x \ (A(x) \land B(x))}{\underbrace{A(x) \land B(x)}} \quad \frac{\exists x \ (A(x) \land B(x))}{\underbrace{A(x) \land B(x)}} \\
\underbrace{\frac{A(x) \land B(x)}{\exists x \ A(x)}} \quad \frac{B(x)}{\exists x \ B(x)} \\
\exists x \ A(x) \land \exists x \ B(x)$$