

$$\begin{array}{c}
\frac{\frac{\frac{\vdash (p \Rightarrow q) \wedge \neg q^{[1]}}{p \Rightarrow q} [\wedge \text{ elim}]}{\vdash (p \Rightarrow q) \wedge \neg q^{[1]}} [\wedge \text{ elim}]}{\frac{\neg p}{(p \Rightarrow q) \wedge \neg q \Rightarrow \neg p} [\Rightarrow \text{ intro from 1}]}
\end{array}$$