

$$\begin{array}{c}
 \text{hyp} \\
 \hline
 (P \wedge Q) \wedge R \vdash P \wedge Q \wedge R \quad (P \wedge Q) \wedge R, P \wedge Q \vdash P \quad (P \wedge Q) \wedge R, P \wedge Q \vdash Q \wedge R \\
 \hline
 \wedge\text{-E(L)} \qquad \qquad \qquad \wedge\text{-I} \\
 (P \wedge Q) \wedge R \vdash P \wedge Q \qquad \qquad \qquad (P \wedge Q) \wedge R, P \wedge Q \vdash P \wedge (Q \wedge R) \\
 \hline
 \text{cut} \\
 (P \wedge Q) \wedge R \vdash P \wedge (Q \wedge R)
 \end{array}$$