Gabarito da atividade 1:

Na soluções abaixo, o conjunto $\{p \to q, p \to r, q \to r \to t, p\}$ será denotado por Γ.

$$\dfrac{\dfrac{\dfrac{\dfrac{\dfrac{\dfrac{\dfrac{}{\Gamma \vdash q \to r \to t}(Ax) \quad \dfrac{\Gamma \vdash p \to q}{}(Ax) \quad \dfrac{}{\Gamma \vdash p}(Ax)}{\Gamma \vdash q}(\to e)}{\Gamma \vdash r \to t}(\to e) \quad \dfrac{\dfrac{}{\Gamma \vdash p \to r}(Ax) \quad \dfrac{}{\Gamma \vdash p}(Ax)}{\Gamma \vdash r}(\to e)}{\Gamma \vdash t}(\to e)}{p \to q, p \to r, q \to r \to t \vdash p \to t}(\to i)}{p \to q, p \to r \vdash (q \to r \to t) \to p \to t}(\to i)}{p \to q \vdash (p \to r) \to (q \to r \to t) \to p \to t}(\to i)}{\vdash (p \to q) \to (p \to r) \to (q \to r \to t) \to p \to t}(\to i)$$