Shortest refutation of prenex normal form

We assume the method and apparatus of Meth8/VŁ4 with Tautology as the designated *proof* value, F as contradiction, N as truthity (non-contingency), and C as falsity (contingency). Results are a 16-valued truth table in row-major and horizontal, or repeating fragments of 128-tables for more variables.

LET p, q: ϕ lc_phi, ψ lc_psi; ~ Not; & And; > Imply; = Equivalent;
necessity, for all or every, $\forall$, $\forall$x; % possibility, for one or some, $\exists$, $\exists$x.

Remark: For clarity, we ignore the x variable below, as it were.

From: en.wikipedia.org/wiki/Prenex_normal_form

"The [implication] rules for removing quantifiers from the antecedent are:

$(\forall x\phi)\rightarrow\psi$ is equivalent to $\exists x(\phi\rightarrow\psi)$, [1.1.1.1]

(#p>q)=%(p>q) ; TTTT TTTT TTTT TTTT (1.1.1.2)

$(\exists x\phi)\rightarrow\psi$ is equivalent to $\forall x(\phi\rightarrow\psi)$. [1.1.2.1]

(%p>q)=#(p>q) ; TTNN TTNN TTNN TTNN (1.1.2.2)

The [implication] rules for removing quantifiers from the consequent are:

$\phi\rightarrow(\exists x\psi)$ is equivalent to $\exists x(\phi\rightarrow\psi)$, [1.2.1.1]

(p>%q)=%(p>q) ; TTTT TTTT TTTT TTTT (1.2.1.2)

$\phi\rightarrow(\forall x\psi)$ is equivalent to $\forall x(\phi\rightarrow\psi)$." [1.2.2.1]

(p>#q)=#(p>q) ; NTNT NTNT NTNT NTNT (1.2.2.2)

Eqs. 1.1.2.2 and 1.2.2.2 as rendered are *not* tautologous. Hence rules for the implication operator refute the prenex normal form.