Demonstration of Tests of Conversion of PM Dot Notation to Parentheses

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SECTION 0. VERIFICATION TESTS (of dot to paren dot icn)
For each proposition is given:
1: the PM notation with dots.
2: the notation with parentheses
3: the Polish (with Lukasiewicz symbols) notation

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∗2·06$\vdash :. p \supset q . \supset : q \supset r . \supset . p \supset r$
∗3·47$\vdash :. p \supset r . q \supset s . \supset : p . q . \supset . r . s$
∗4·22$\vdash : p \equiv q . q \equiv r . \supset . p \equiv r$
∗4·41$\vdash :. p . \vee . q . r : \equiv . p \vee q . p \vee r$
∗4·43$\vdash :. p . \equiv : p \vee q . p \vee \sim q$
∗4·44$\vdash :. p . \equiv : p . \vee . p . q$
∗4·87$\vdash :. p . q . \supset . r : \equiv : p . \supset . q \supset r : \equiv : q . \supset . p \supset r : \equiv : q . p . \supset . r$
∗4·88$\vdash :. p . q . \supset . r . \equiv : p . \supset . q \supset r : \equiv : q . \supset . p \supset r : \equiv : q . p . \supset . r$
∗5·33$\vdash :. p . q \supset r . \equiv : p : p . q . \supset . r$
From Landon D. C. Elkind's Paper in Russell: Vol. 43, no. 1, page 44
∗431·441$\vdash . p \vee q . \equiv . r \supset s$
∗431·442$\vdash : p . \vee . q \equiv r : \supset : s$
∗431·443$\vdash : p \vee q . \equiv . r : \supset : s$
∗431·444$\vdash : p : \vee : q \equiv r . \supset . s$
∗431·445$\vdash : p : \vee : q . \equiv . r \supset s$
From same, page 54
∗431·54$\vdash : p . q : r . s : \supset : p . s : r . q$
check longer prop name
Propositions involving quantifiers
∗9·2$\vdash : (x) . \psi x . \supset . \psi y$
∗9·21$\vdash :. (x) . \psi x \supset \phi x . \supset : (x) . \psi x . \supset . (x) . \phi x$
∗9·22$\vdash :. (x) . \psi x \supset \phi x . \supset : (\exists x) . \psi x . \supset . (\exists x) . \phi x$
∗9·31$\vdash :. (\exists x) . \phi x . \vee . (\exists x) . \phi x : \supset . (\exists x) . \phi x$
∗9·401$\vdash :: p : \vee : q . \vee . (\exists x) . \psi x :. \supset :. q : \vee : p . \vee . (\exists x) . \psi x$
∗10·35$\vdash :. (\exists x) . p . \psi x . \equiv : p : (\exists x) . \psi x$

$*11{\cdot}2 \vdash : (x,y) . \phi[x,y] . \equiv . (y,x) . \phi[x,y]$
One Step in proof of 11.55 I wanted example of 2 adjacent quantifiers - hard to find.
$*11{\cdot}551 \vdash :. (x) :. (\exists y) . \psi x . \phi[x,y] . \equiv : \psi x : (\exists y) . \phi[x,y]$
From same, page 46
$*431{\cdot}46 \vdash : (x) . \psi x . \phi x . \supset . (x) . \psi x$
Other Tests
$*99{\cdot}99 \vdash :. \sim(\exists x) : \sim\psi x . \supset . (x) . \sim\psi x$