13 Design symbols for the 10 two-operand binary operators that are not presented in Section 1.0, and find laws about these operators.

After trying the question, scroll down to the solution.

S Keeping the 6 two-operand binary operators that are presented in Section 1.0 as they are, I add new ones to match them. (If I were to design all 16 symbols, I would choose those of <u>Unified Algebra</u>.)

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Τ⊥	Т	Т	Т	Т	\bot	\bot	\bot	\bot	Т	Т	Т	Т	\bot	\bot	\bot	\perp
LΤ	Т	Т	\bot	\bot	Т	Т	\bot	\bot	Т	Т	\bot	\bot	Т	Т	\bot	\bot
$\perp \perp$	Т	\bot	Т	\bot	Т	\bot	Т	\bot	Т	\bot	Т	\bot	Т	\bot	Т	\perp

For laws, there are so many that I hardly know where to start.

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x \neq y

\neg (x \neq y)

\top \ll x

x \gg \top

\neg (\bot \ll x)

\neg (x \gg \bot)

(x \gg y) = (y \ll x)

(x \ll y) = x

(x \gg y) = y

and so on.
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