

Transcomputation - Exercise 8

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1 Sheffer Stroke

The Sheffer Stroke, $|$, can be implemented in terms of the operations Not and And so that $pq| = \text{Not}(\text{And}(p, q))$. Equivalently $pq| = \neg(p \& q)$. Here the Sheffer Stroke is a post-fix operator. Write out the multiplication table for the Sheffer Stroke.

2 Connectives

Which Boolean connectives are implemented by the following Sheffer Stroke formulas?

2.1 $pp|$

2.2 $pq|pq||$

2.3 $pp|qq||$