

Propositional logic as a formal language

↳ It has three kinds of symbols which may vary in each presentation. (ie.)

i) Sentence letters : a, b, \dots, z

ii) Operators (ie: connectives):

$\sim, \wedge, \vee, \rightarrow, \leftrightarrow.$

iii) Parenthesis : (ie: $\{ \}, (), \dots$)

↳ which is used in algebra and arithmetic operations.

Formulas in Propositional logic

$\{ p, q, r, \dots \} \cup \{ p_1, p_2, p_3, \dots \}$
 $\cup \{ \neg, \wedge, \vee, \rightarrow, (,) \}.$

These are well-formed formulas.