

**Definition 3.6.** [00G] (Solved on 2022-10-11) **Well-formed formulas** are

- atomic formulas, i.e. composed of a single variable, or
- a formula of the type  $\neg(\alpha)$  where  $\alpha$  is a well-formed formula, or
- - a formula of the type  $(\alpha) \Rightarrow (\beta)$ , or
  - a formula of the type  $(\alpha) \Leftrightarrow (\beta)$ , or
  - a formula of the type  $(\alpha) \vee (\beta)$ , or
  - a formula of the type  $(\alpha) \wedge (\beta)$ ,where  $\alpha, \beta$  are two well-formed formulas.