In ?? we defined a notion of provability of a formula in a system $\Sigma$. We now extend this notion to provability in $\Sigma$ from formulas in a set $\Gamma$.

**Definition prf.1.** A formula $\varphi$ is derivable in a system $\Sigma$ from a set of formulas $\Gamma$, written $\Gamma \vdash_{\Sigma} \varphi$ if and only if there are $\psi_1, \ldots, \psi_n \in \Gamma$ such that $\Sigma \vdash \psi_1 \rightarrow (\psi_2 \rightarrow \cdots (\psi_n \rightarrow \varphi) \cdots)$.