Resolution Algorithm

Goal: Determine whether $\{\varphi_1, \ldots, \varphi_k\} \models \varphi$ **holds**

1. Let ψ be the formula $\varphi_1 \wedge \ldots \wedge \varphi_k \wedge \neg\varphi$.

2. Transform ψ into Skolem normal form $\forall X_1, \ldots X_n \, \xi$.

3. Transform ξ into CNF resp. into clause set $\mathcal{K}(\xi)$.

4. Compute $Res^*(\mathcal{K}(\xi))$.

   If one finds $\square$, stop and return "**true**".

   Otherwise, if $Res^*(\mathcal{K}(\psi))$ was computed completely, stop and return "**false**".