

$$\textcircled{2} \quad \forall x \forall y \varphi(x, y) \Rightarrow \exists x (\psi(x) \Rightarrow \forall z \varphi(x, z))$$

$$\neg (\forall x \forall y \varphi(x, y) \Rightarrow \exists x' (\psi(x') \Rightarrow \forall z \varphi(x', z)))$$

$$A \Rightarrow B = \neg A \vee B$$

$$\neg(A \Rightarrow B) = A \wedge \neg B$$

$$\neg \forall x \forall y \varphi(x, y) \wedge \forall x' (\psi(x') \wedge \exists z \neg \varphi(x', z)) \leftarrow \text{negate}$$

$$\forall x \forall y \forall x' \exists z (\varphi(x, y) \wedge \psi(x') \wedge \neg \varphi(x', z)) \leftarrow \text{PREnexNITVARI}$$