

$$\neg(\forall xy(\mathcal{P}(x) \supset \mathcal{Q}(y)) \supset (\exists \mathcal{P}(x) \supset \forall y\mathcal{Q}(y)))$$

$$\Phi \wedge \supset \Psi$$

$$(\forall xy(\mathcal{P}(x) \supset \mathcal{Q}(y)) \neg(\exists \mathcal{P}(x) \supset \forall y\mathcal{Q}(y)))$$

$$\Phi \wedge \neg \Psi$$

$$\exists \mathcal{P}(x) \neg \forall y\mathcal{Q}(y))$$

$$\mathcal{P}(a) \neg \mathcal{Q}(b)$$

$$\mathcal{P}(a) \supset \mathcal{Q}(b)$$

$$\neg \mathcal{P}(a)$$

$$\mathcal{Q}(b)$$

X

X

contraddizione

contraddizione