

# Introductory Logic: Worksheet 5

October 29, 2025

## 1 Problem 1

Prove the following:

$$\neg\forall x(Fx \rightarrow Gx) \vdash \exists x(Fx \wedge \neg Gx)$$

## 2 Problem 2

Are  $\forall x \exists y Rxy$  and  $\exists y \forall x Rxy$  equivalent? Explain why or why not.