

Math 2283 - Introduction to Logic

Quiz #17 - 2006.12.08

Name: _____

Fill in the missing pieces, both in the steps, and in the justification, to complete the proof.

$\exists x\forall y\neg Gxy$
 $\therefore \neg\forall x\exists yGxy$

1. $\exists x\forall y\neg Gxy$ Premise
- 2.
3. $\forall x\exists yGxy$ Assumption
- 4.
- 5.
- 6.
7. ($\quad \wedge \neg \quad$) \wedge I, 5, 6
8. $\forall x\exists yGxy \Rightarrow$ ($\quad \wedge \neg \quad$) \Rightarrow I, 3-7
9. $\neg\forall x\exists yGxy$ \neg I, 8