

Math 2283 - Introduction to Logic

Quiz #10 - 2012.09.19

Name: _____

Remember that we have proved, in this chapter, the following theorems:

Theorem I: Leibniz's Law

Theorem II: $x = x$

Theorem III: $x = y \rightarrow y = x$

Theorem IV: $(x = y \wedge y = z) \rightarrow x = z$

Theorem V: $(x = z \wedge y = z) \rightarrow x = y$

Theorem VI: $(x = y \wedge y = z \wedge z = t) \rightarrow x = t$

Use Theorems I-VI along with R.O.D. and any other known logical laws to prove:

Theorem VII: $(x = y \wedge y = z \wedge t = z) \rightarrow t = x$