

Math 2283 - Introduction to Logic

Quiz #11 - 2006.10.27

Solutions

Determine which of the following formulas are wff's. Here, G is a two-place predicate and T a three-place predicate.

1. $\forall x \exists y (Gxy \Rightarrow Tyyx \wedge Gax)$

Not a wff.

2. $\forall x (\exists y (Gxy \Rightarrow Tyyx) \wedge Gax)$

Is a wff.

3. $\forall x \neg (\exists y (Gxy \Rightarrow Tyyx) \wedge Gax)$

Is a wff.

4. $\neg (\exists y (Gxy \Rightarrow \forall x Tyyx) \wedge Gax)$

Is a wff.

5. $\neg (\exists y (Gxy \Rightarrow \forall x Tyyx))$

Not a wff.

6. $\neg \exists y (Gxy \Rightarrow \forall x Tyyx) \wedge Gax$

Not a wff.