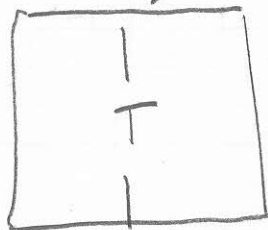


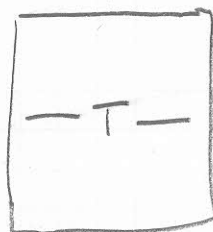
$$\forall x \forall y \equiv \forall y \forall x$$

implies



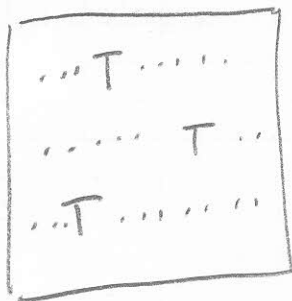
$\exists x \forall y$   
at least  
one  
column  
is all T

implies



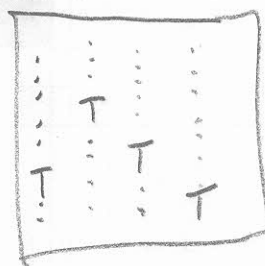
$\exists x \forall y$   
at least one row  
is all T

implies



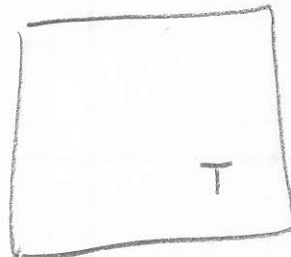
$\forall x \exists y$   
all rows have  
at least one  
T in them

implies



$\forall y \exists x$   
all columns  
have at least  
one T in them

implies



implies

$$\exists x \exists y \equiv \exists y \exists x$$

the whole table has at  
least one T, somewhere.