

Quiz Solutions are under Files on Canvas

English to Math

Almost always start with \exists , \forall , $\neg\exists$, $\neg\forall$.

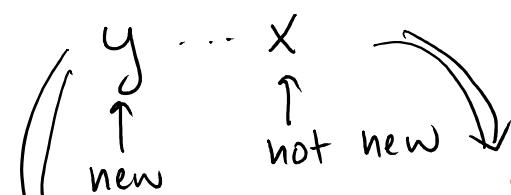
- Try to rephrase using this language

ex: "None...."

$\neg\exists$

- If introduce a new variable, must be quantified, but input variables to predicate should not be quantified

$H(x) =$



$\forall y \in S, \dots$

or $\exists y \in S, \dots$

~~$\exists x \in S$~~

~~$\forall x \in S$~~

wrong

- Always give a domain when quantifying

WRONG $\forall x,$
 $\exists x:$

$\forall x \in S,$ ← Correct
 $\exists x \in S:$ ←

- Be careful about types. For example:

$[\text{predicate/statement}] \wedge [\text{predicate/statement}] \Rightarrow [\text{predicate/statement}]$

$[\text{element}] \in [\text{set}] \Rightarrow [\text{Predicate/statement}]$

$[\text{Set}] \subseteq [\text{Set}] \Rightarrow [\text{Predicate/statement}]$

$[\text{set}] \cap [\text{set}] \Rightarrow [\text{Set}]$