

Review of nested quantifiers

Recall:

- ▶ $\forall x \in \mathbb{Z} \exists y \in \mathbb{Z}$ such that $x < y$
- ▶ $\exists x \in \mathbb{Z}$ such that $\forall y \in \mathbb{Z} x < y$

These are different statements – and one of them is not true!

Sometimes these statements are written without the “such that” (and they don’t change meaning!).