- For $n, m \in \mathbb{N}$:
  - $R(n, m) \equiv$ every natural number less than $m$ divides $n$
  - $T(n, m) \equiv$ there is a natural number les than $m$ that divides $n$
  - $W(n, m) \equiv n$ and $m$ don't have a common factor
  - $S \equiv$between every two real different real numbers is another real number
  - Rewrite $\neg\exists x: P(x)$ using $\forall$, rewrite $\neg\forall x, P(x)$ using $\exists$

- For $n, m \in \mathbb{N}$:
  - $R(n, m) \equiv$ every natural number less than $m$ divides $n$
    - $\forall p \in \mathbb{N}, p < m \rightarrow p | n$
  - $T(n, m) \equiv$ there is a natural number les than $m$ that divides $n$
    - $\exists p \in \mathbb{N}, p < m \wedge p | n$
  - $W(n, m) \equiv n$ and $m$ don't have a common factor
    - $\neg \exists p \in \mathbb{Z}: p | n \wedge p | m$
  - $S \equiv$between every two real different real numbers is another real number
    - $\forall x, y \in \mathbb{R}, x \neq y \rightarrow \exists z \in \mathbb{R}: x < z < y \vee y < z < x$
  - Rewrite $\neg \exists x: P(x)$ using $\forall$, rewrite $\neg \forall x, P(x)$ using $\exists$
    - $\forall x, \neg P(x)$. $\exists x: \neg P(x)$