Chapter 2.10

3. Negate the statement "For every prime number p, there is another prime q such that $q > p$."

There exists a prime number p for which all prime numbers q satisfy $q \leq p$.

4. Negate the statement: "For every positive number ϵ, there is a positive number σ such that $|x - a| \Rightarrow \big|f(x) - f(a)\big|$."

There exists a prime number p for which all prime numbers q satisfy $q \leq p$.

23. Prove that for every a, $b \in \mathbb{Z}$ and $n \in \mathbb{N}$, $a^3 \equiv b^3 (mod\ n)$.

woot.