My Simplest theorem

Theorem  Any natural number that has a divisor greater than itself equals zero.

Proof  We observe for any natural \( n,d,q \)

\[
 n = d \cdot q \land d > n \\
= \{ \text{Leibniz} \} \\
 n = d \cdot q \land d > d \cdot q \\
= \{ d > 0 \} \\
 n = d \cdot q \land 1 > q \\
= \{ q \text{ is natural} \} \\
 n = d \cdot q \land q = 0 \\
\Rightarrow \{ \text{Leibniz} \} \\
 n = 0
\]

(End of Proof)

At least twice - EWD1088 & EWD1170 - I had used that 0 is the only natural number with infinitely many divisors - e.g. \( 2^k \) for any \( k \) -, but I never took the trouble to prove it, and that probably explains why I missed the above.

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