Proof. Let $\mathbb{N} \ni x > 1$. By Archimedean Property of Natural Numbers) and $x \geq \mathbb{N}$ - Thus:

$$\begin{aligned} &= x^{-1}\left(\frac{1}{x}\right)^{1} \\ &= x^{-1} \cdot \left(\frac{1}{x}\right) \\ &= \frac{1}{x^{2}} = \end{aligned}$$

$\blacksquare$