

Prove the following Proposition: *Let $a, b \in \mathbf{R}^+$. The positive solution to $ax^3 + bx - 1 = 0$ is unique.*

(Remember, x is a FUNCTION variable, and shouldn't be treated as a PROOF variable the way a and b can be. If you want to substitute something for x , pick a new letter, and give its domain, as we do for other proof variables.)