

Inverse Functions and Restricted Domains: Apply and Create



Name: _____ Date: _____

Use what you learned to explain, construct or apply an idea.

Reverse the mapping

An inverse reverses a one-to-one function's mapping. For $f(x) = 2x + 3$, the inverse is $(x - 3)/2$. The rule x^2 requires a restricted domain to have an inverse function.

1. Why does x^2 over all real numbers fail the one-to-one condition?

2. Restrict x^2 to $x \geq 0$. What inverse rule and domain are appropriate?
