

## Inverse functions

### Title: The Mirror Room - Exploring Inverse Functions

#### Concept: Inverse Rules in Mathematics



**Intuition Pump:** Imagine you're in a room lined with mirrors, each reflecting an image back at you. Just as a mirror reflects an image back to its original appearance from a specific perspective, inverse functions reflect one function through a mathematical 'mirror' to get back to the original value.

#### Visual Analogy:

**Mirrors and Reflections:** Consider how standing in front of a mirror reverses your left and right, yet maintains your overall appearance. In math, applying a function and then its inverse brings you back to your original position or value, much like stepping away from a mirror and then back to your original spot reflects your unchanged image.