Name _____

Decoding Derivatives: Unveiling the Secrets of Functions

Open-Ended Response Answer Key

1. Finding derivatives is compared to solving a puzzle, where each piece fits together to reveal the bigger picture.
2. The power rule applies to functions raised to a power and allows us to find the derivative by multiplying the exponent by the coefficient and reducing the exponent by one.
3. The chain rule is used when functions are nested within each other and allows us to find the derivative of the outer function multiplied by the derivative of the inner function.
4. The derivative tells us how quickly the function is increasing or decreasing at any given point, thus providing information about its rate of change.