

Name _____

Calculating Success: The Role of Calculus in Economics and Finance

Open-Ended Response Answer Key

1. Calculus helps economists analyze functions representing costs, revenues, or profits to find the maximum or minimum values, which allows them to make optimal decisions.
2. Calculus is used to calculate derivatives such as the delta and gamma of financial instruments, which help investors manage risk and make informed investment decisions.
3. Calculus is essential for estimating and interpreting econometric models, which involve complex mathematical equations and statistical analysis of economic data.
4. For example, economists use differential equations to model the growth rate of GDP over time, which allows them to analyze trends in economic development and make predictions about future economic performance.

