Calculus Videos

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Part I

Rate of Change at a Point RoC at a point

Introduction

On the next pages, you will watch videos and use interactives, and will then answer some questions about the video.

On the bottom of each screen you will see next and back buttons. Continue until the pages say stop, after the google form.

 $Video:\ Approximating\ Instantaneous\ Rates\ of\ Change$

YouTube link: https://www.youtube.com/watch?v=_CkJ5w1D148

 $Interactive:\ Approximating\ Instantaneous\ Rates\ of\ Change$

The embedded image on this page is currently broken and being fixed. In the meantime, please go to https://geogebra.org/m/afsEHCg4

Geogebra link: https://tube.geogebra.org/m/afsEHCg43200

 $Video:\ Over-\ and\ Under-estimates$

YouTube link: https://www.youtube.com/watch?v=wGoueomxcBM

Questions

1 FA IpQLSehKQZEFzEL5kE8 ZucHW7 DkKzNEcLU2 ESTlythkMPyxpWiolg8001500

Stop

This is the end of the RoC at a point section.

Part II Curve Sketching Curve Sketching

Introduction

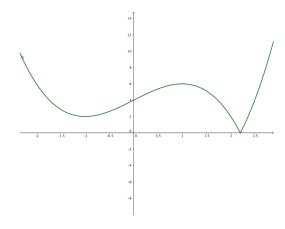
On the next page, you will watch a video on graphing derivative functions and will then answer some questions about the video.

Video

YouTube link: https://www.youtube.com/watch?v=XbiKMDjFc8w

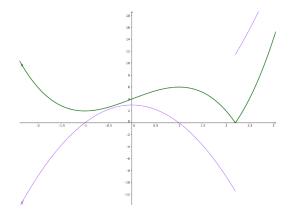
Question

Try it out! What will the derivative of this function look like?



Answer

Should be something similar to:



Questions

 $1 \\ FAIpQLSeaeb47 \\ qTqqoW_Sy4dpXGfYIRVQLwtd17a93llNf0HGJ_GBA8001500$

Stop

This is the end of the curve sketching section.

Part III The Power Rule The Power Rule

Introduction

On the next pages, you will watch videos on using the power rule and will then answer some questions about the video.

The Power Rule

Video

YouTube link: https://www.youtube.com/watch?v=1ycGers95mo

The Power Rule

Questions

 $1 \\ {\rm FAIpQLSfbBEr24GCMjO5D31sSLbRquiBtJiC0JE}_{1K5_M9yyNPTQkA} \\ 8001500$

The Power Rule

Stop

This is the end of the power rule section.

Part IV

More Derivative Rules More Derivative Rules

Introduction

On the next pages, you will watch a video about derivatives of exponential and logarithmic functions and will then answer some questions about the video.

More Derivative Rules

Video

YouTube link: https://www.youtube.com/watch?v=i3kjirwbQ6o

More Derivative Rules

Questions

1 FA IpQLS fo S9 dam PZY shKkEZ sY6 oN 0 Y9S bruKvIBvtz AY ob 6 Pw1 hxHTw8001500

More Derivative Rules

Stop

This is the end of the more derivative rules section.

Part V The Chain Rule

The Chain Rule

Introduction

On the next page, you will watch a video about the chain rule and will then answer some questions about the video.

The Chain Rule

Video

YouTube link: https://www.youtube.com/watch?v=WfHtaCKIeBY

The Chain Rule

Questions

1 FA IpQLS fMvnGU2 tgkX6 FFJ f9 sums CeMjuGKykN3 RZCQbrnscsxctg2 Q8001500

The Chain Rule

Stop

This is the end of the chain rule section.

Part VI

Optimization Optimization

Introduction

On the next pages, you will watch a video on optimization and will then answer some questions about the video.

Optimization

Video

YouTube link: https://www.youtube.com/watch?v=TzyU7GGy3P4

Optimization

Questions

1 FA IpQLSc8y7G351b6xmGqmhMHNZRI114mXH37jS4UOeaQqJtLb8ZLMA8001500

Optimization

Stop

This is the end of the optimization section.

Part VII Riemann Sums

Riemann Sums

Introduction

On the next page, you will watch a video about Riemann sums and will then answer some questions about the video.

Riemann Sums

Video

YouTube link: https://www.youtube.com/watch?v=dvLD6-VhzsE

Riemann Sums

Questions

1 FA IpQLS d9xcB0VR of -GbXmrrD70 a7RLC aMZ gxEH1 v1 tKEMI oSQdWtVQ8001500

Riemann Sums

Stop

This is the end of the Riemann sums section.

Part VIII Indefinite Integrals Indefinite Integrals

Introduction

On the next page, you will watch a video about Indefinite Integrals and will then answer some questions about the video.

Indefinite Integrals

Video

YouTube link: https://www.youtube.com/watch?v=EzTJq6fW6XE

Indefinite Integrals

Questions

1 FA IpQLS fPEwyAIt5 a YUejLnpT4 mpJJXKX dWqH6-Y7FSX wuhjea UfKig8001500

${\bf Indefinite\ Integrals}$

Stop

This is the end of the Indefinite Integrals section.