
Calculus Videos

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Part I

Rate of change at a point

Rate of change 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.

Rate of change at a point

Video: Approximating Instantaneous Rates of Change

YouTube link: <https://www.youtube.com/watch?v=M2Cpa3FxfUU>

Rate of change at a point

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://geogebra.org/m/afsEHCg4>

Rate of change at a point

Video: Over- and Under-estimates

YouTube link: <https://www.youtube.com/watch?v=1w9MxqF6JJc>

Learning outcomes:

Derivatives

Questions

Google Form link: https://docs.google.com/forms/d/e/1FAIpQLSfZUo0j1KZELVxCw75TgQg_XcUsl81gvjseGsELIpsf98mGSw

Learning outcomes:

Derivatives

Stop

This is the end of the Rate of change at a point section.

Learning outcomes:

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.

Curve Sketching

Video

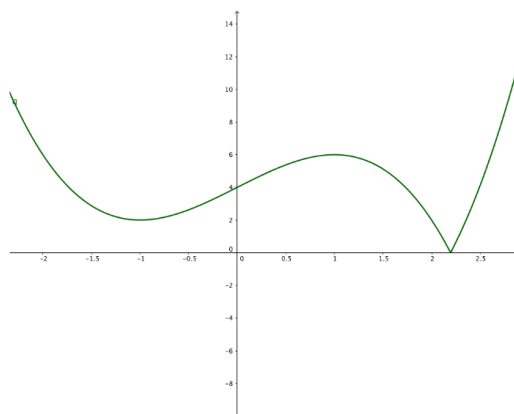
YouTube link: <https://www.youtube.com/watch?v=XbiKMDjFc8w>

Learning outcomes:

Curve Sketching

Question

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

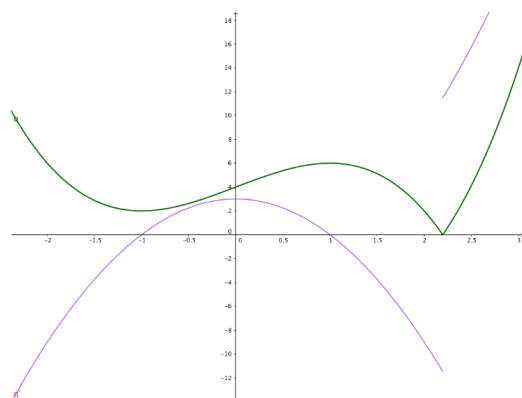


Learning outcomes:

Curve Sketching

Answer

Should be something similar to:



Learning outcomes:

Curve Sketching

Questions

Google Form link: <https://docs.google.com/forms/d/e/1FAIpQLSeJYFkuGEg8V7zBGTA-em0hijN-eX0b8U2->

Learning outcomes:

Curve Sketching

Stop

This is the end of the curve sketching section.

Learning outcomes:

Part III

The Power Rule

The Power Rule

Introduction

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

Learning outcomes:

The Power Rule

Video: The Power Rule

YouTube link: <https://www.youtube.com/watch?v=kTxhvyG0wG0>

Learning outcomes:

Using Basic Derivative Rules

Questions

Google Form link: <https://docs.google.com/forms/d/e/1FAIpQLScReDMv7yMqgBjb70KR79339J1qbxIkjw0hEF9NDCZQupGBQ>

Learning outcomes:

Using Basic Derivative Rules

Stop

This is the end of the power rule section.

Learning outcomes:

Part IV

More Derivative Rules

More Derivative Rules

Introduction

On the next pages, you will watch a video about additional derivative rules and will then answer some questions about the video.

More Derivative Rules

Video

YouTube link: <https://www.youtube.com/watch?v=VCa0gbCFufk>

Learning outcomes:

More Derivative Rules

Questions

Google Form link: <https://docs.google.com/forms/d/e/1FAIpQLSf3-M4AtUp2HwkTi1evzov2XvVb6F0qoqvm>

Learning outcomes:

More Derivative Rules

Stop

This is the end of the more derivatives rules section.

Part V

The Chain Rule

The Chain Rule

Introduction

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

The Chain Rule

Video

YouTube link: <https://www.youtube.com/watch?v=-khOG1MMZZ4>

Learning outcomes:

The Chain Rule

Questions

Google Form link: <https://docs.google.com/forms/d/e/1FAIpQLScgKQF5WIVVCMxqo6ImvjJ8TKOD6aJ6qRDD>

Learning outcomes:

The Chain Rule

Stop

This is the end of the chain rule section.

Learning outcomes:

Part VI

Optimization

Optimization

Introduction

On the next page, you will watch a video about the shapes of graphs, derivatives, and optimization and will then answer some questions about the video.

Optimization

Video

YouTube link: <https://www.youtube.com/watch?v=UJCLC9HhzyA>

Learning outcomes:

Optimization

Questions

Google Form link: https://docs.google.com/forms/d/e/1FAIpQLSdfHrK1EG6GnItN8_EsUyaazPkiPPilwUcsftHnYcjBju4QTQ

Learning outcomes:

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=e9s8rsPpIrA>

Learning outcomes:

Riemann Sums

Questions

Google Form link: <https://docs.google.com/forms/d/e/1FAIpQLSfZmQNCsQTA-ouLH2y70BMkiaslbhwaJBF2>

Learning outcomes:

Riemann Sums

Stop

This is the end of the Riemann Sums section.

Learning outcomes:

Part VIII

Riemann Sums

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=5xMXine8uDs>

Learning outcomes:

Indefinite Integrals

Questions

Google Form link: <https://docs.google.com/forms/d/e/1FAIpQLSdDXIYGg4gtr9cNPn0jbzONX6Sd8CPdZTC->

Learning outcomes:

Indefinite Integrals

Stop

This is the end of the Indefinite Integrals section.