

## Resources on Limits

### Paul's Online Notes:

You can find his lessons on limits here: <http://tutorial.math.lamar.edu/Classes/Calcl/LimitsIntro.aspx>

Alignment with textbook sections:

Paul's page	Our section
Tangent Lines and Rates of Change	2.1: The Tangent and Velocity Problems
The Limit	2.2: The Limit of a Function
One-Sided Limits	2.2: The Limit of a Function
Limit Properties	2.3: Calculating Limits Using the Limit Laws
Computing Limits	2.3: Calculating Limits Using the Limit Laws
Infinite Limits	2.2: The Limit of a Function
Limits at Infinity, Parts I and II	2.6: Limits at Infinity; Horizontal Asymptotes
Continuity	2.5: Continuity

### Khan Academy:

You can find their videos on limits here: [https://www.khanacademy.org/math/differential-calculus/limits\\_topic](https://www.khanacademy.org/math/differential-calculus/limits_topic)

\* = a tutorial exercise

#### 2.2: The Limit of a Function

Introduction to limits

Inferring a limit from numerical data

Estimating limit numerically

\*Finding limits numerically

One-sided limits from graphs

\*One-sided limits from graphs

Determining which limit statements are true

Two-sided limit from graph

\*Two-sided limits from graphs

Limits and infinity

#### 2.3: Calculating Limits Using the Limit Laws

Limit example 1

Limit properties

\*Two-sided limits using algebra

\* Two-sided limits using advanced algebra

#### 2.5: Continuity

Limits to define continuity

Limit and function defined at point of discontinuity

#### 2.6: Limits at Infinity; Horizontal Asymptotes

Limits at positive and negative infinity

More limits at infinity

Limits at infinity using algebra