



Find the derivative using the rules for differentiation.

a) $f(x) = -2x^2 + 3x - 6$

$f'(x) = \frac{d}{dx}(-2x^2 + 3x - 6)$

$= \frac{d}{dx}(-2x^2) + \frac{d}{dx}(3x) - \frac{d}{dx}(6) = 0$

$= (-2) \frac{d}{dx}(x^2) + 3 \frac{d}{dx}(x) - 0$

$= -2(2x) \frac{d}{dx}(x) + 3(1)$

$f'(x) = -4x + 3$

b) $S(t) = t^3 + 5t^2 - 3t - \sqrt{t}$

$S'(t) = \frac{d}{dt}(t^3 + 5t^2 - 3t - \sqrt{t})$

$= \frac{d}{dt}(t^3) + \frac{d}{dt}(5t^2) - \frac{d}{dt}(3t) - \frac{d}{dt}(\sqrt{t})$

$= (3)(t^2) \frac{d}{dt}(t) + (5)(2)(t) \frac{d}{dt}(t) - (3) \frac{d}{dt}(t) - \frac{1}{2} t^{-1/2} \frac{d}{dt}(t)$

$= 3t^2(1) + 10t(1) - 3(1) - \frac{1}{2} t^{-1/2}$

$S'(t) = 3t^2 + 10t - 3 - \frac{1}{2\sqrt{t}}$

Mathematics

Undergraduate Mathematics Programs

Lehman College Department of Mathematics professors help you investigate the function of numbers, formulas, shapes, structures, and spaces; preparing you to solve problems that go far beyond the classroom.



Majors

Mathematics: B.A.

Mathematics majors develop reasoning, problem-solving skills, and abstract thinking. Students often pursue careers in finance, engineering, computer science, data analysis, research, and academia.

Mathematics and Economics: B.A.

This major combines the principles of economics with mathematical methods and analysis. It provides students with a rigorous quantitative background in both fields and prepares them for a wide range of careers in industries such as finance, consulting, data analysis, and government.

Note for prospective teachers: Undergraduate majors pursuing NYS teaching certification should consult with their education program adviser before choosing the required elective courses.

Minors

Actuarial Mathematics

Providing students with a foundation in the principles and practices of actuarial science, this program prepares students for the initial actuarial exams required to become a certified actuary.

Partnership: The Department of Mathematics established a partnership with Berkshire Hathaway Specialty Insurance to develop internship opportunities and enhance its Actuarial Science programs.

Statistics

A statistics minor provides students with a foundation in statistical methods and analysis, and can be a valuable addition to a variety of majors, including mathematics, computer science, biology, psychology, sociology, and economics.

Pure Mathematics

A mathematics minor is a valuable addition to majors in other STEM fields, business, and economics. It is useful preparation for graduate study in mathematics and related fields, as well as careers in areas such as data analysis, finance, cryptography, or research and development.

Faculty Expertise

Faculty in the Department of Mathematics publish their research widely and have earned national and international recognition for their work.

Brian Allen

- » Geometric Analysis
- » Metric Geometry
- » General Relativity

Jason Behrstock

- » Geometric Group Theory
- » Low Dimensional Topology

Renee Bell

- » Galois Covers of Curves in Characteristic p
- » Fundamental Groups of Curves
- » Ramification Theory
- » Abhyankar's Conjectures

Renato Bettiol

- » Geometric Analysis
- » Differential Geometry

Celia Cruz

- » Constructivism
- » Calculus
- » Best Teaching Practices

Joseph Fera

- » Hyperbolic Geometry
- » Complex Variables
- » Interdisciplinary Collaborations

Tanja Haxhoviq

- » Number Theory
- » Combinatorics

Kevin Johnson

- » Number Theory
- » Combinatorics
- » Mathematics Education

Leon Karp

- » Analysis
- » Differential Equations
- » Differential Geometry

Nikola Lakic

- » Hyperbolic Geometry
- » Teichmueller Theory

Chen-Yun Lin

- » Geometric Analysis
- » Spectral Geometry
- » Metric Geometry
- » Shape analysis

Melvyn Nathanson

- » Algebra
- » Number Theory
- » Combinatorics

Megan Owen

- » Discrete Mathematical Biology
- » Geometric Statistics
- » Trees

Rob Schneiderman

- » Geometric Topology

Christina Sormani

- » Metric Geometry
- » Geometric Analysis
- » General Relativity

Zoltan Szabo

- » Differential Geometry
- » Geometric Spectral Theory
- » Mathematical Physics

Brian Wynne

- » Model Theory

Mahmoud Zeinalian

- » Topology
- » Geometry
- » Physics

William Quattromani

- » Complex Analysis
- » Combinatorics
- » Number Theory

ALUMNI SPOTLIGHT

“Having a degree in math gives you various career opportunities, but actuarial science has to be one of the top earning ones.”

Christopher Stanley '18

Actuarial Assistant

Berkshire Hathaway Specialty Insurance



Join the Club

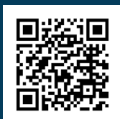
The Archimedes Club is an inclusive space for math fans at all skill levels. In addition to offering workshops, resources, and peer support, the club invites guest speakers from various fields that use mathematics, such as cryptography, computer science, and finance.



Formula for Success

From aerospace to real estate, mathematics provides a strong foundation for any career that requires problem-solving with numbers. Add Lehman's low tuition, flexible schedules, and opportunities for learning outside the classroom, and you have a formula for success.

FOR MORE INFORMATION



lehman.edu/mathematics

718-960-8117

Gillet Hall, Room 211A, 250 Bedford Park Blvd. West, Bronx, NY 10468

Students interested in undergraduate research should reach out to faculty based on their research area: lehman.edu/mathematics/faculty.php



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