



SAGE WORLD TUITION CENTRE  
思銳世界補習中心  
(北角分校 North Point Branch)

UNIVERSITY OF TORONTO  
HONOURS BACHELOR OF ARTS  
HIGH Distinction

Excellence

3 Years

"Dean's List Scholar"  
"2022 Winter Dean's List Scholar",  
"2023 Winter Dean's List Scholar" and  
"2024 Summer Dean's List Scholar"

30A's

out of 40 courses  
GPA was 3.71/4.00

IF I CAN DO IT,  
YOU CAN TOO!

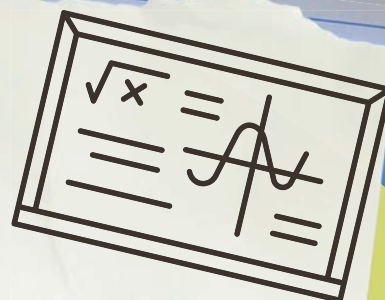
Burton Poon



2024

$$\frac{dy}{dx}$$

# 2025 SUMMER CALCULUS FOR BEGINNERS



**Learn Calculus in 4 Weeks  
Before School Starts!**

**Date: July 7-31 OR August 4-28**  
**Every Monday, Tuesday, and Thursday**  
**Time: 3 - 4:30pm (90 Minutes)**  
**Course Fee: \$1,700 / 4 Lessons**



**Instructor: Burton Poon**

**University of Toronto Graduate: A- in Calculus**  
**La Salle (Toronto): 98% in Calculus Exam**



Unit A, 4/F, 228 Electric Road, North Point, Hong Kong

[www.SageWorldNP.com](http://www.SageWorldNP.com)



**2396 6399**

This course is designed for high school students who are about to enter their first Calculus class. No formal background in Calculus is required to take the course but some understanding in Algebra and Trigonometry is beneficial.

## Main Topics

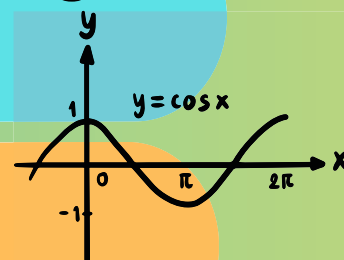
$$\lim_{\theta \rightarrow 0} \frac{\sin \theta}{\theta} = 1$$

Evaluating Limits  $\lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$

Finding Horizontal and Vertical Asymptotes

Definition of the Derivative, Finding Tangent and Normal Lines

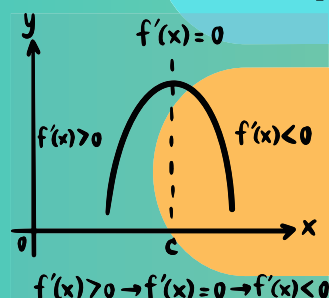
$$\frac{d}{dx}(x^n) = nx^{n-1}$$



Rules for Differentiation and Differentiating Trigonometric Functions

$\frac{d}{dx}(f(g(x))) = f'(g(x))g'(x)$  The Chain Rule and Implicit Differentiation

Differentiating Inverse Trigonometric, Exponential, and Logarithmic Functions



Applications of Differentiation  
Curve Sketching, Optimization, & Related Rates

