



Business Administration Department
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2D & 3D Graphics Powerful Tools

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Introduction

Graphs are powerful tools used to visually represent data, with two-dimensional (2D) and three-dimensional (3D) graphs being among the most important types of graphical representations used for analyzing and understanding data.

Graphing is employed in various fields such as mathematics, science, engineering, statistics, and many others.

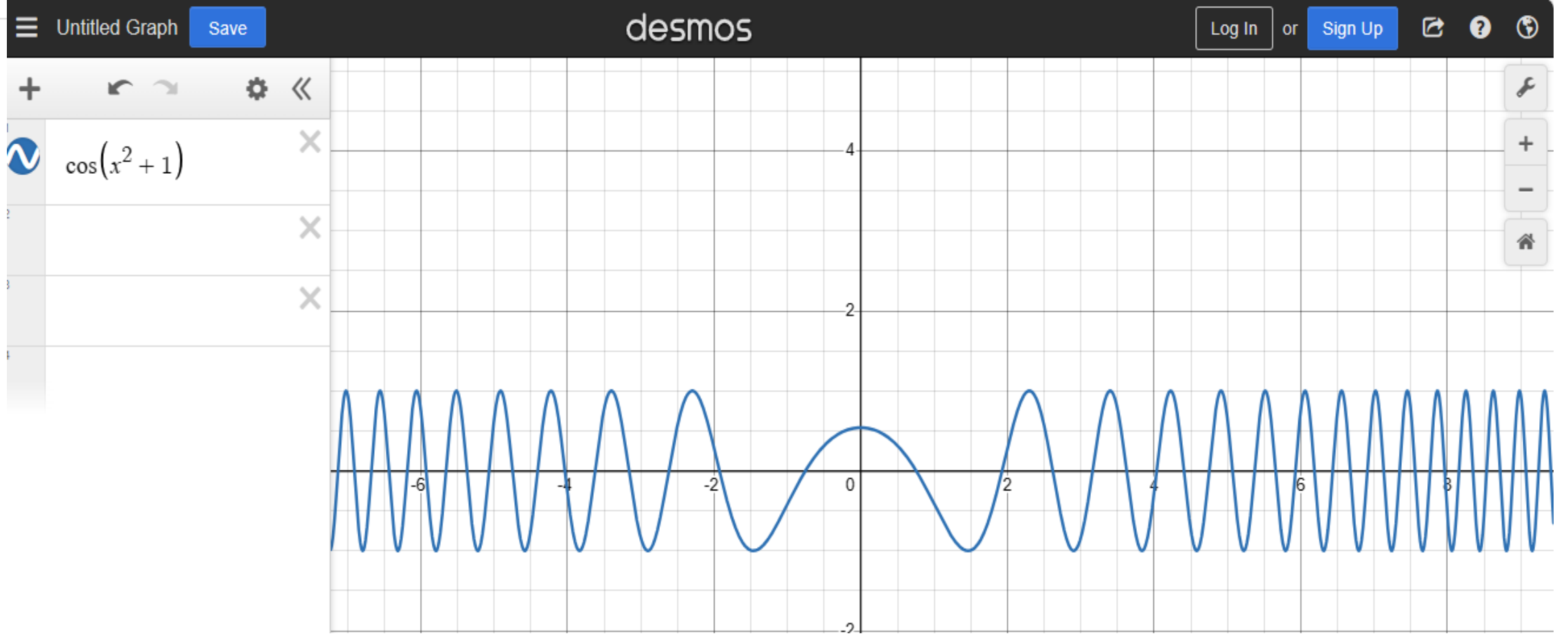
Three effective tools for drawing 2D and 3D graphics will be discussed:

1. Desmos.
2. GeoGebra.
3. 3D graphing calculator.

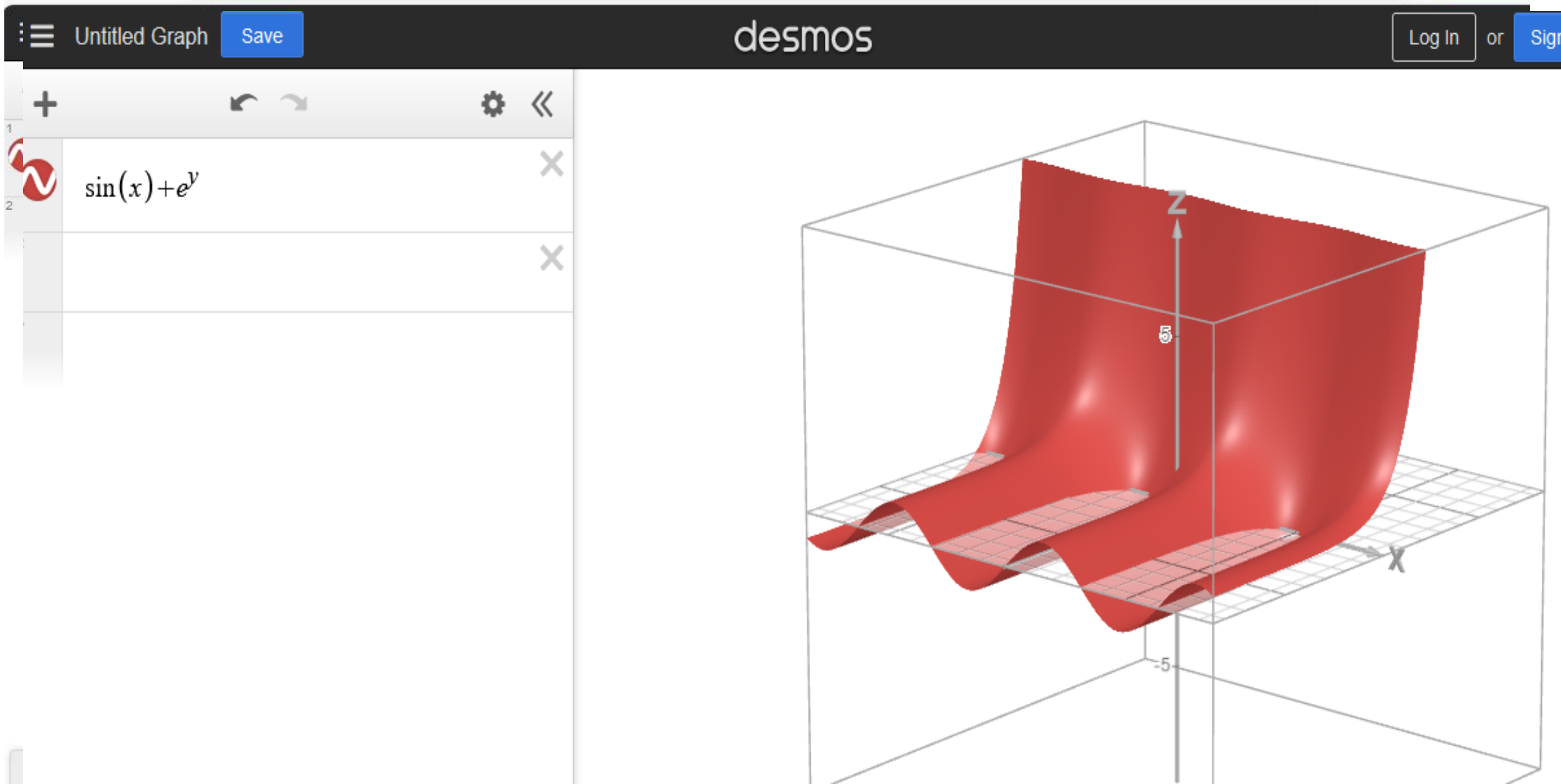
Desmos is a math teaching tool that uses graphing to create advanced visuals. This learning platform uses a web- and app-based platform to let students play with math in a way that creates visual results thanks to graphs.

[Desmos | Graphing Calculator](#)



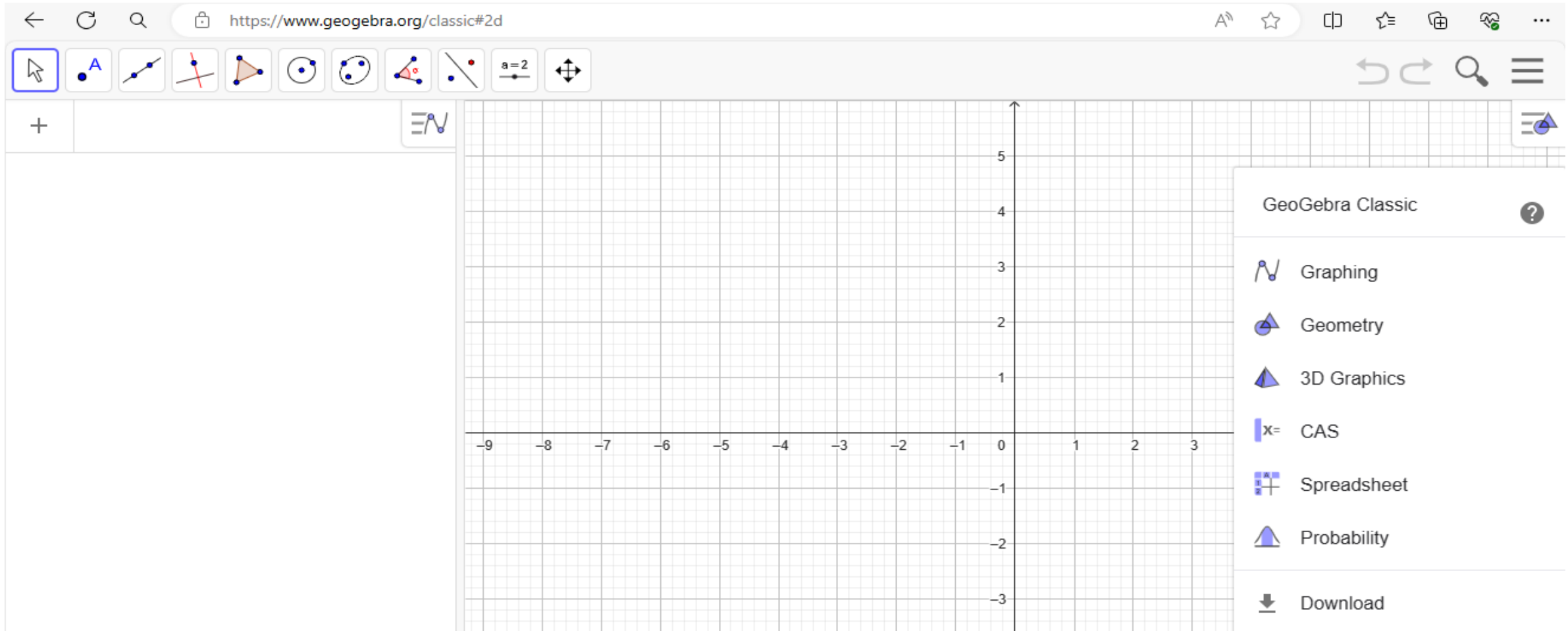


<https://www.desmos.com/3d>



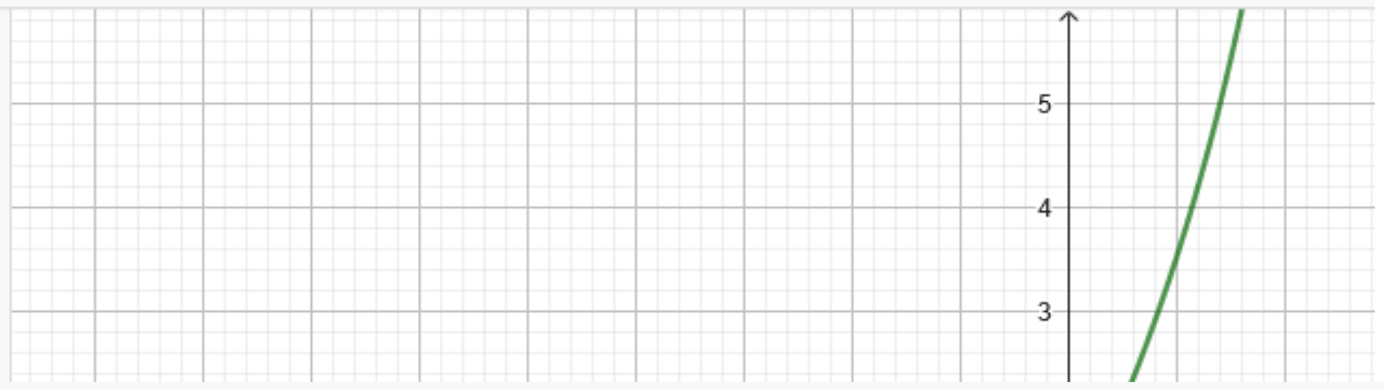
GeoGebra is a dynamic mathematics software for all levels of education that brings together geometry, algebra, spreadsheets, graphing, statistics and calculus in one engine.

GeoGebra Classic





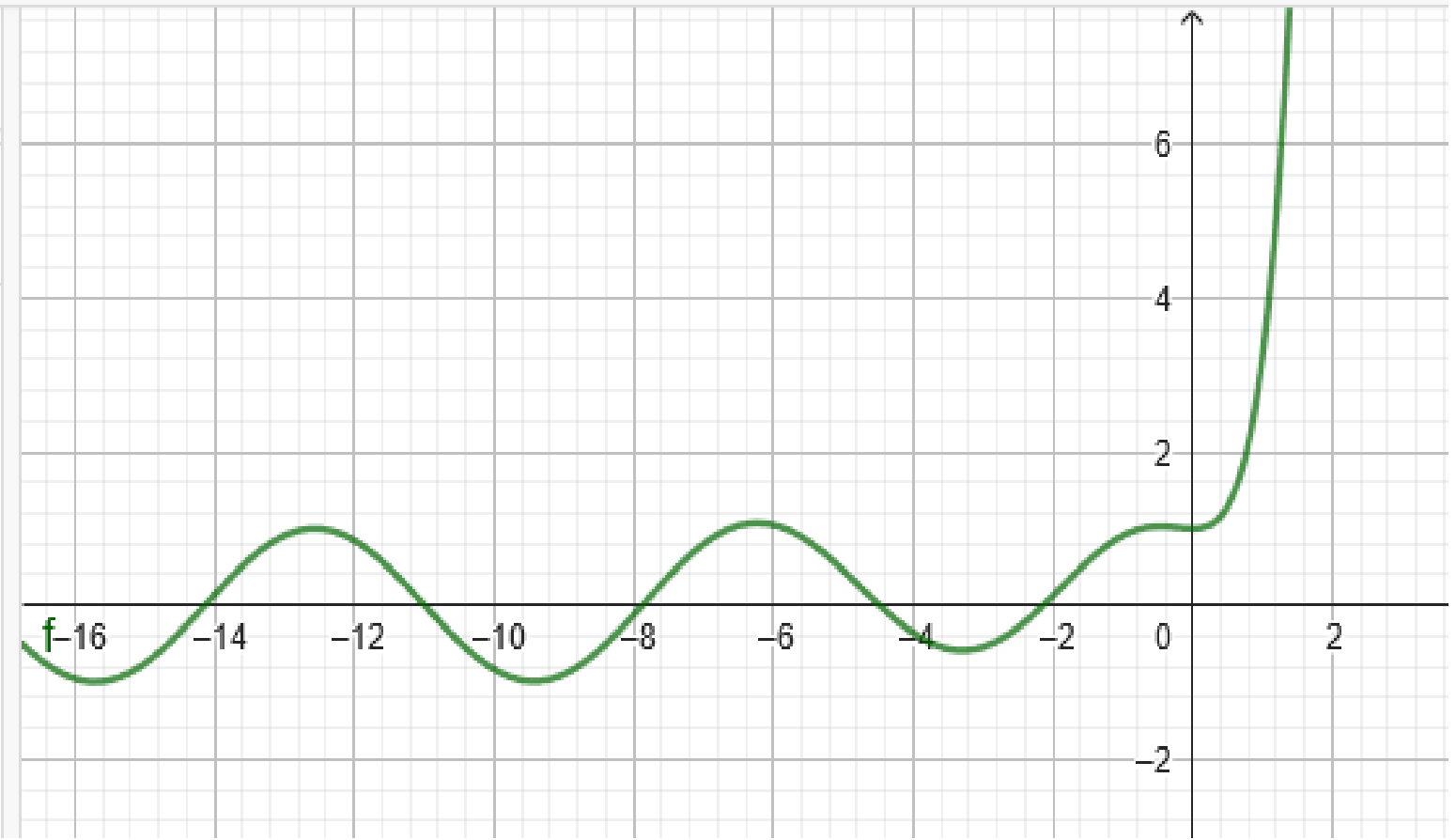
+ $e^x + \sin(x)$ ⋮



$$f(x) = x^2 e^x + \cos(x)$$

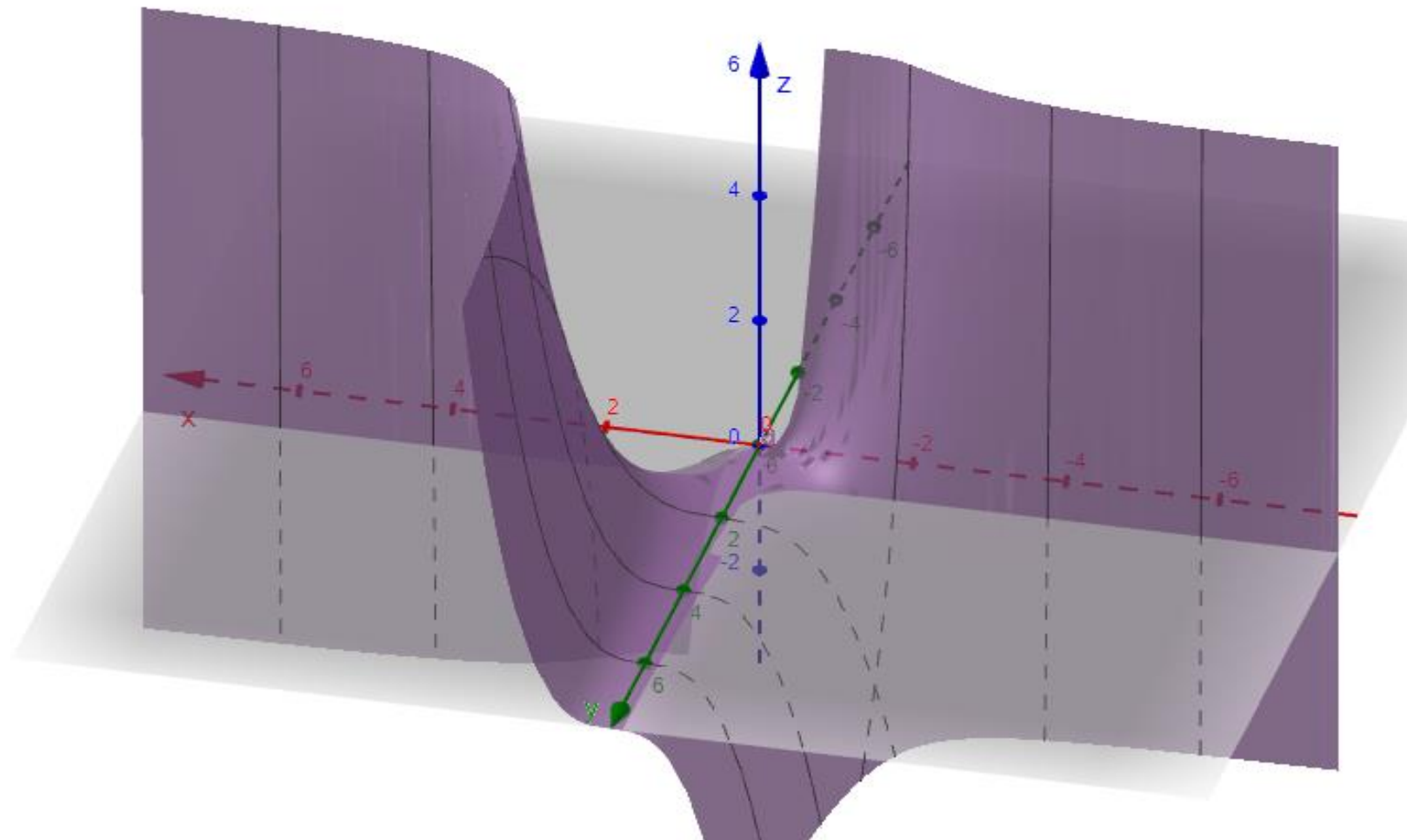


Input...



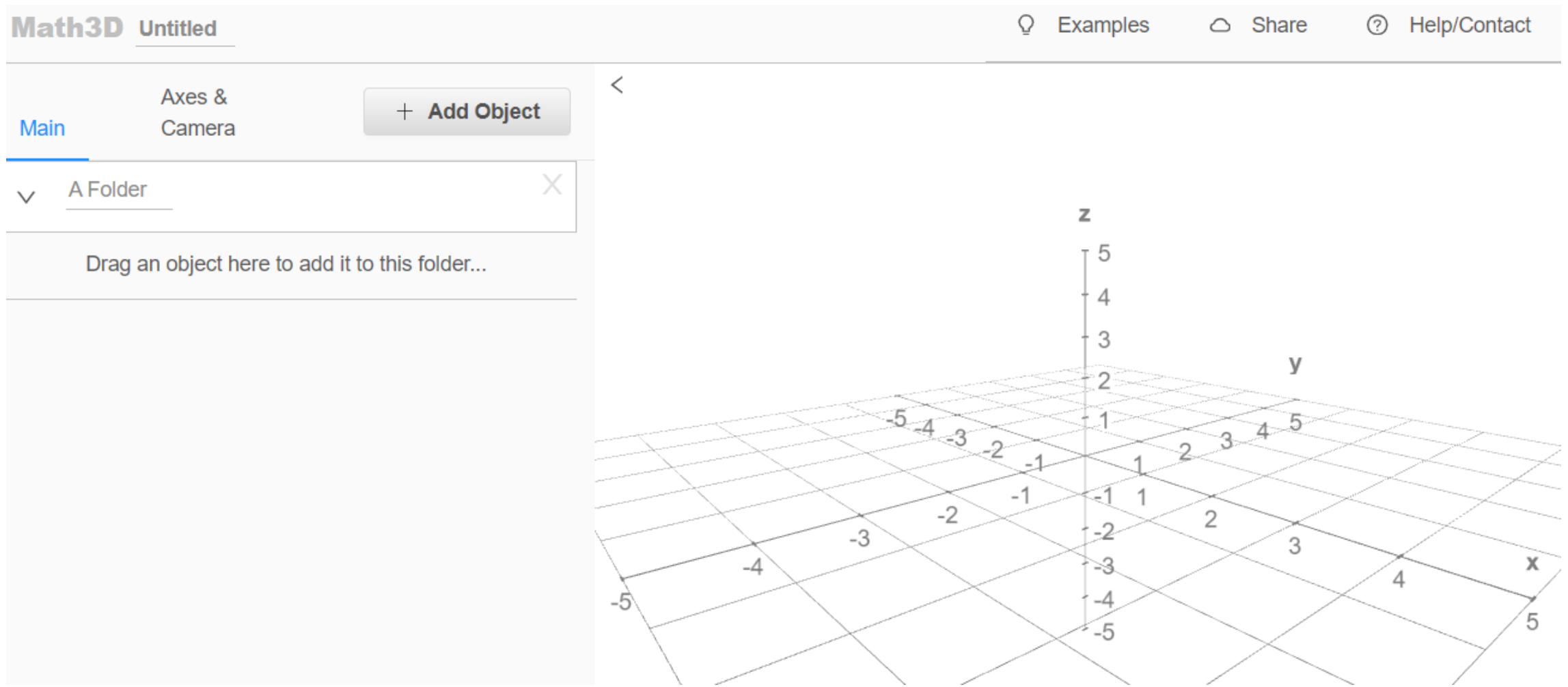
<https://www.geogebra.org/3d>

●	$a(x, y) = x^3 \log_{10}(y)$	⋮
+	Input...	



3D graphing calculator: An interactive 3D graphing calculator in our browser to draw, animate, and share surfaces, curves, points, lines, and vectors.

[Math3d: Online 3d Graphing Calculator](#)



Main

Axes & Camera

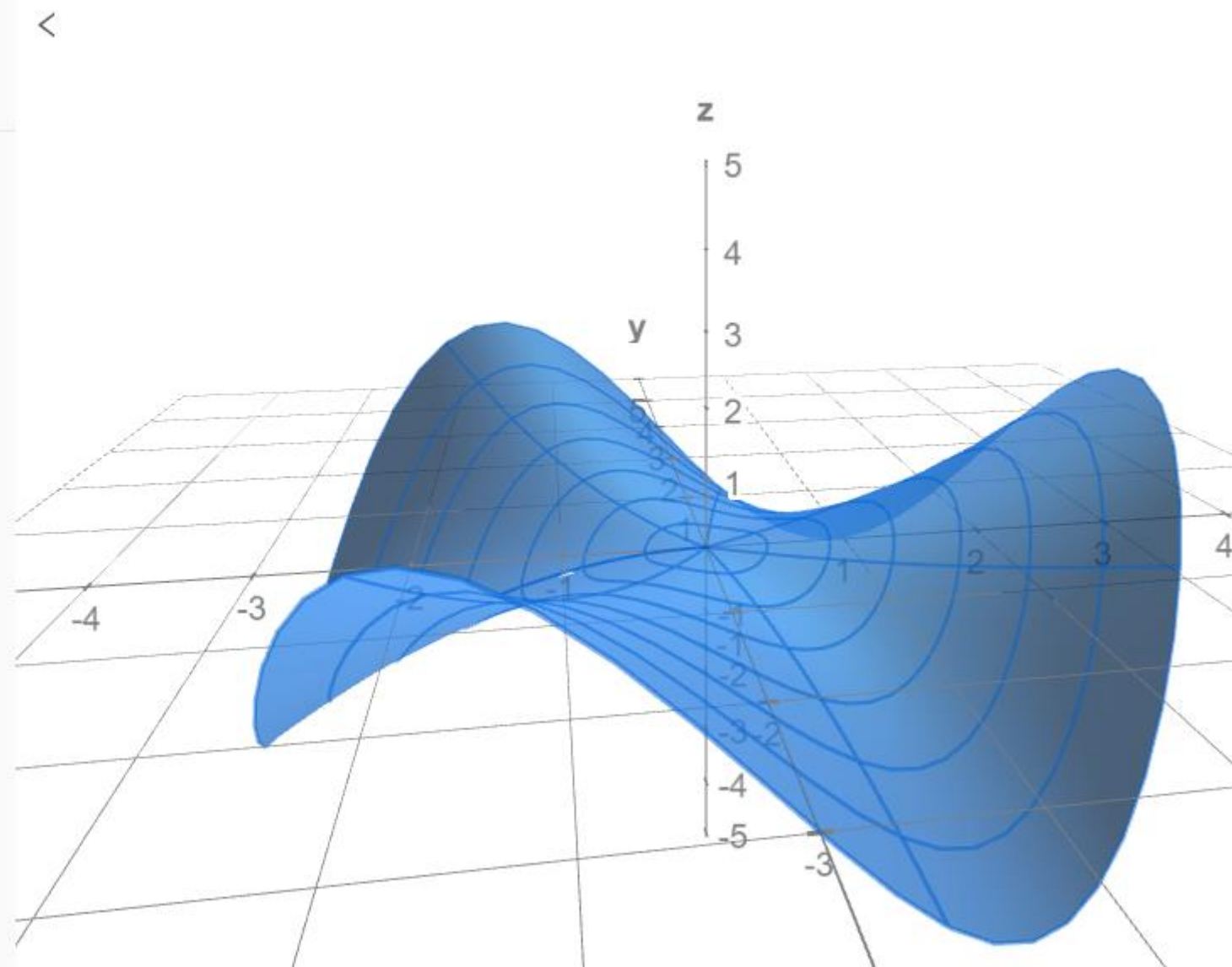
+ Add Object

Explicit Surface (Polar)

$\frac{1}{4} r^2 \cdot \cos(3\theta)$

$r \in [0, 3]$

$\theta \in [-\pi, \pi]$



Thank you for your attention

