



# Uso de la tecnología para favorecer la visualización

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# Visualización



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- ¿Porqué es importante la visualización en Matemáticas?
- ¿Qué impacto tiene en la enseñanza-aprendizaje?
- ¿Cómo se relacionan con las representaciones?



# SimCalc Math Worlds

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Kaput Center for Research and Innovation in STEM Education - Windows Internet Explorer

http://www.kaputcenter.umassd.edu/products/software/smwcalc/

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Kaput Center for Research and Innovation in STE...

UMass | Dartmouth University of Massachusetts Dartmouth

Kaput Center for Research and Innovation in STEM Education

PEOPLE PROJECTS GRADUATE EVENTS PRODUCTS PUBLIC WIKI BLOG ABOUT US SEARCH

## SimCalc MathWorlds® Software for Calculators

Research Proven Impact on Student Learning and Motivation!

Education Week highlights SimCalc MathWorlds®.

Products

- Software
- Curriculum
- Publications
- Technical Reports
- Annual Reports
- Video Tutorials
- Web Resources

Software

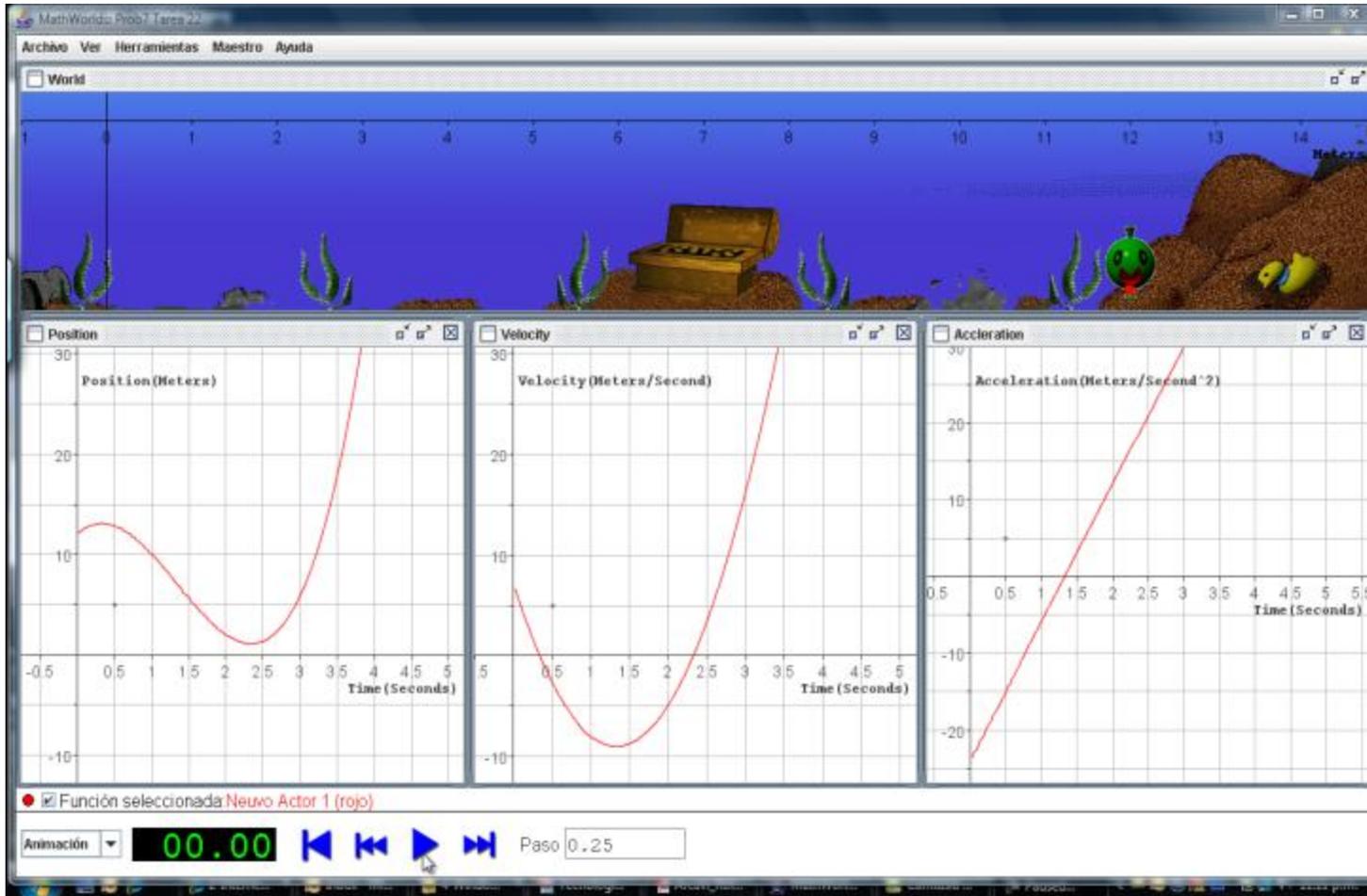
- SimCalc MathWorlds® for Calculators
- SimCalc MathWorlds® for Computers
- Free Calculator Software

Buy a Full License and become a member of the SimCalc User Community.



# SimCalc Math Worlds

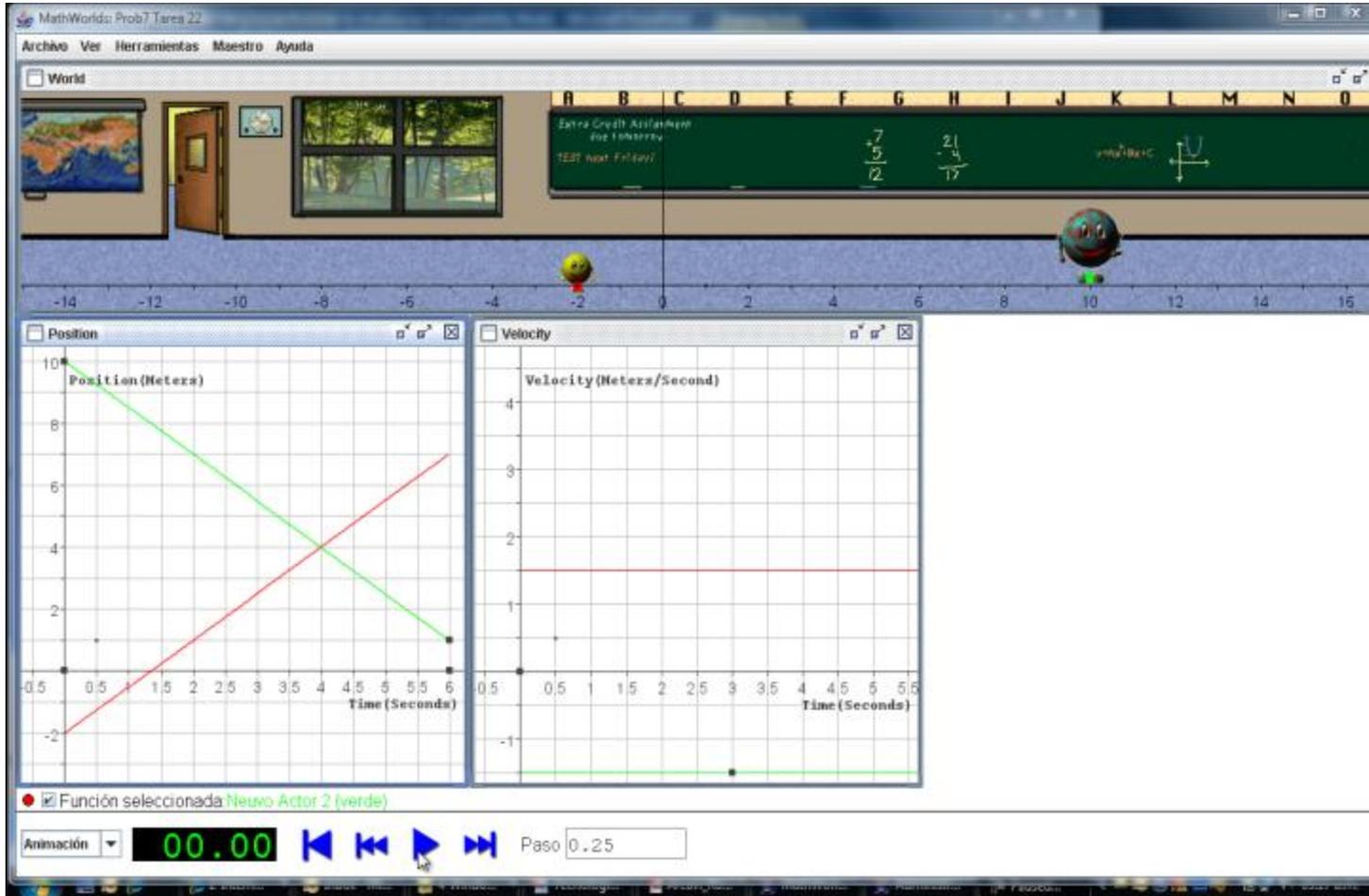
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# SimCalc Math Worlds

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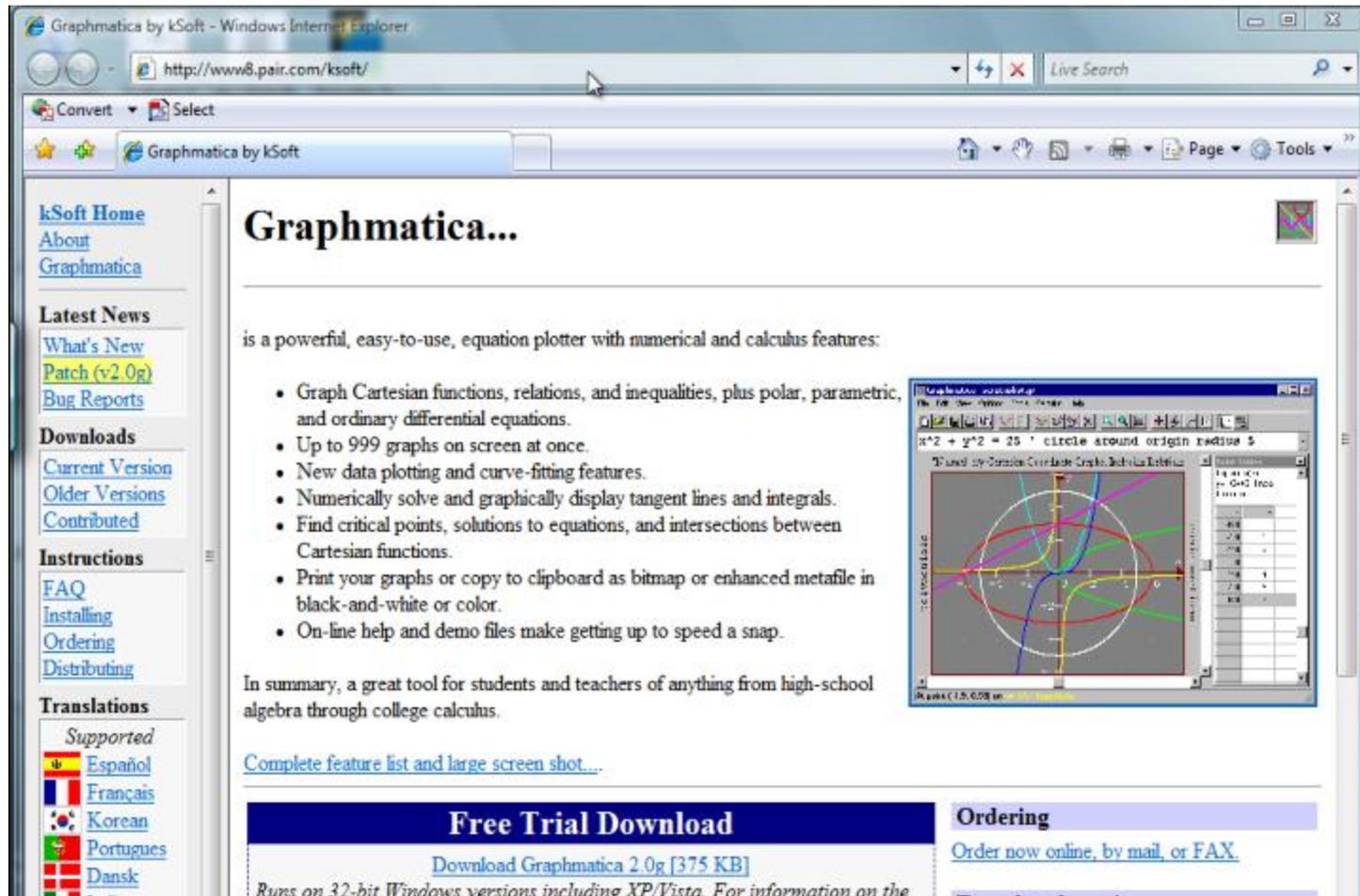


# SimCalc Math Worlds



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- Favorece la conexión entre la representación gráfica y la representación física
- Promueve la comparación entre diferentes “movimientos” a través de la inclusión de “actores”
- Facilita el análisis cualitativo del comportamiento de una función y su derivada
- Detona conceptos a trabajar en clase



Graphmatica by kSoft - Windows Internet Explorer  
 http://www8.pair.com/ksoft/

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 Graphmatica by kSoft

**Graphmatica...**

is a powerful, easy-to-use, equation plotter with numerical and calculus features:

- Graph Cartesian functions, relations, and inequalities, plus polar, parametric, and ordinary differential equations.
- Up to 999 graphs on screen at once.
- New data plotting and curve-fitting features.
- Numerically solve and graphically display tangent lines and integrals.
- Find critical points, solutions to equations, and intersections between Cartesian functions.
- Print your graphs or copy to clipboard as bitmap or enhanced metafile in black-and-white or color.
- On-line help and demo files make getting up to speed a snap.

In summary, a great tool for students and teachers of anything from high-school algebra through college calculus.

[Complete feature list and large screen shot...](#)

**Free Trial Download**  
[Download Graphmatica 2.0g \[375 KB\]](#)

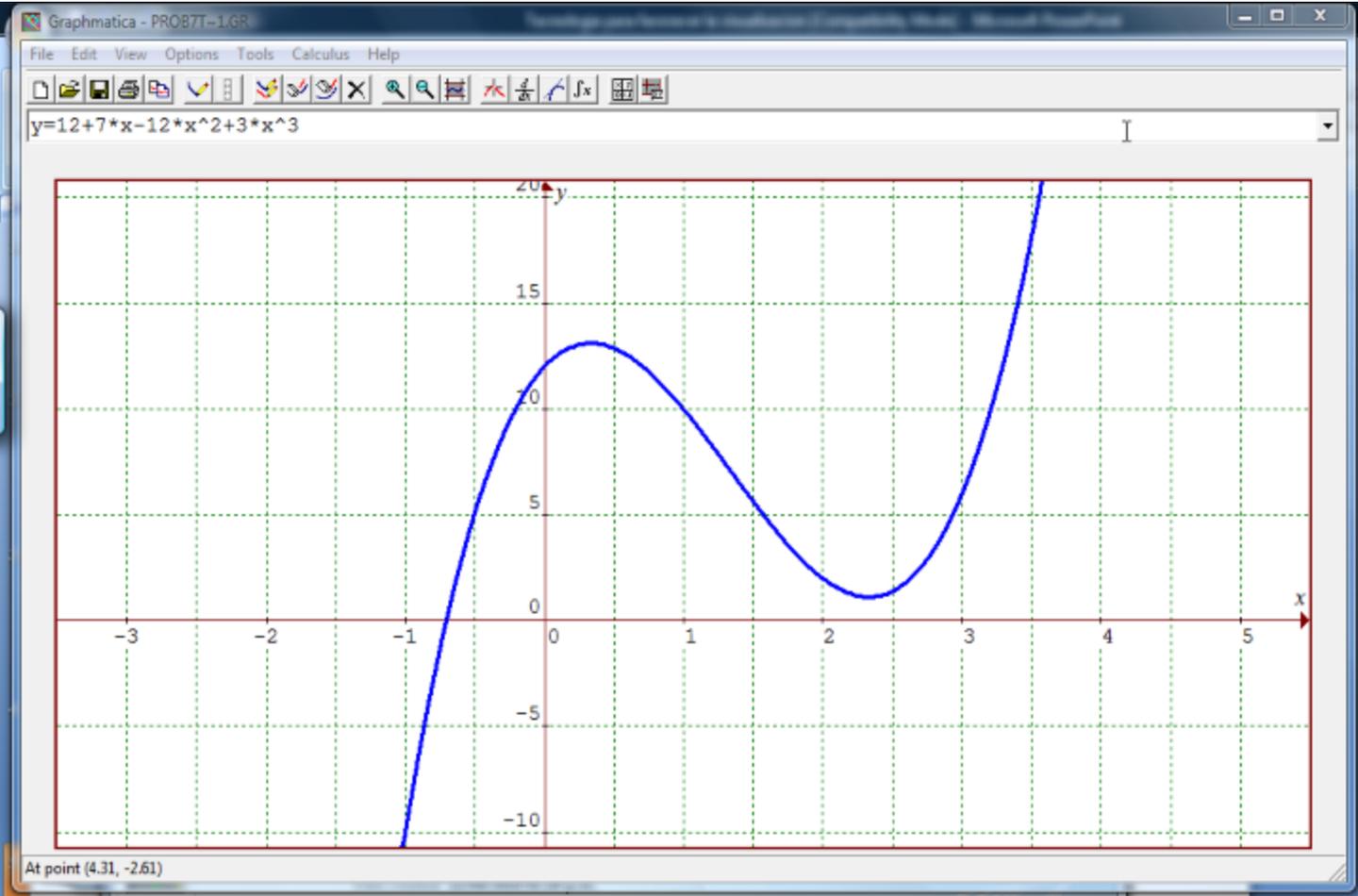
**Ordering**  
[Order now online, by mail, or FAX.](#)

*Runs on 32-bit Windows versions including XP/Vista. For information on the*



# Graphmatica

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# Graphmatica



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- Facilita la representación gráfica de una función y su derivada
- Agiliza el cálculo de los valores “importantes” de una función
- Requiere de la función para realizar los cálculos



# Graphing Calculator

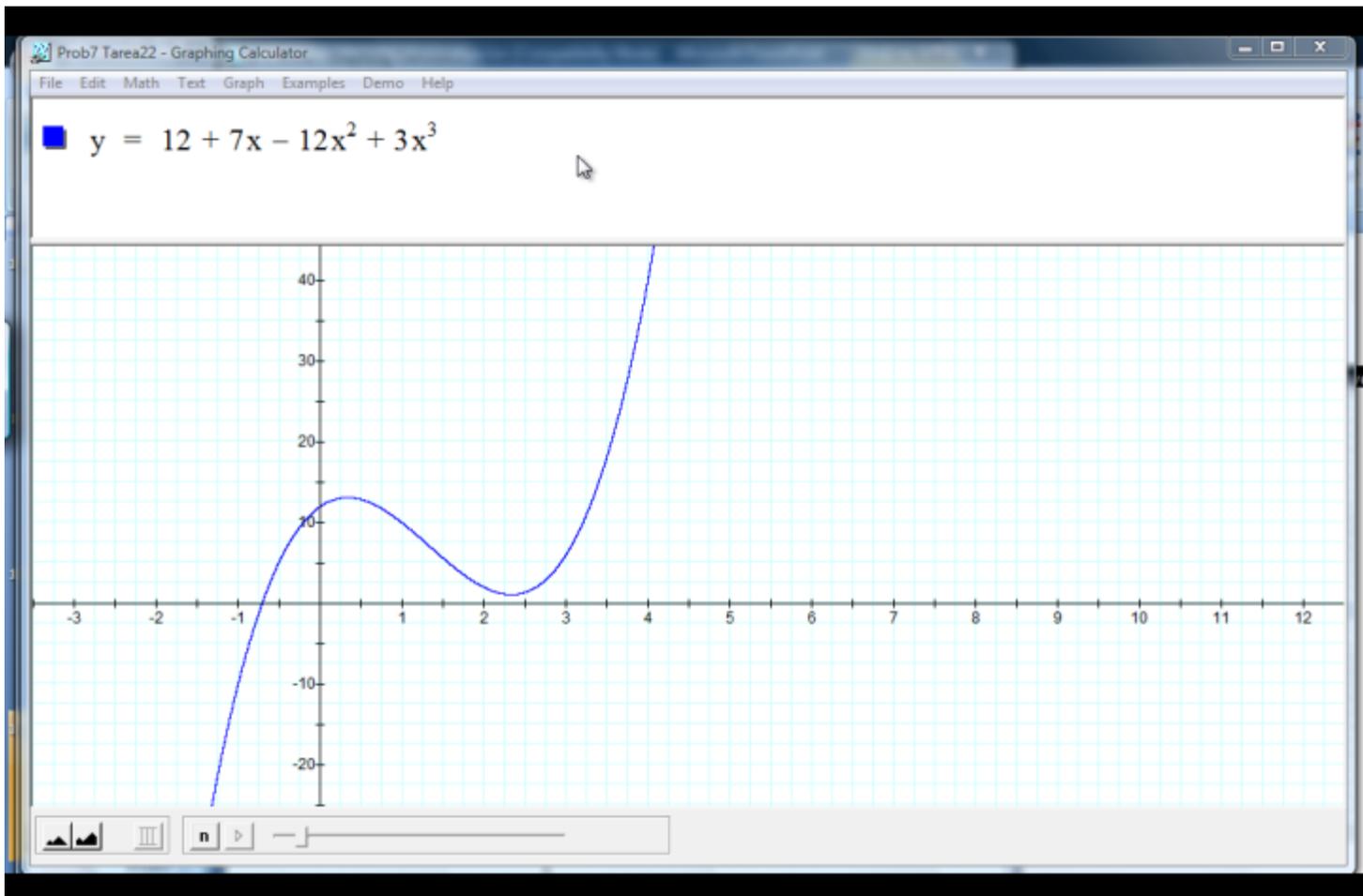
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A screenshot of a Windows Internet Explorer browser window displaying the Pacific Tech website. The browser's address bar shows the URL "http://www.pacifict.com/". The website has a navigation menu with links for "Home", "Products", "News", "Contact", and "Gallery". The main content area features the "Pacific Tech" logo, a wavy blue line, and the title "Graphing Calculator for Macintosh and Windows". Below this, it says "Easy to learn. Easy to use. Type an equation. See the result." and shows a text input field containing the equation  $r = 3 + 0.1 \cos n\phi$ . To the right of the equation is a 3D pie chart. Below the equation is a small image of the Earth. On the right side of the page, there is a vertical list of links: "Tour", "Downloads", "Users Gallery", and "Order here", each preceded by a red circular bullet point. The left sidebar of the website contains three 3D rendered objects: a purple and green figure-eight shape, a yellow and red sphere, and a red flower-like shape.



# Graphing Calculator

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# Graphing Calculator



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- Facilita la visualización de acercamientos a un punto de una función
- Agiliza el análisis de parámetros de una función
- Requiere de las funciones.
- Favorece el análisis a través de los efectos

# Reflexión



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- ¿Cuál es el objetivo de la actividad?
- ¿Cómo se va a introducir?
- ¿Qué características se busca resaltar?
- ¿Qué software me permite lograr el objetivo de manera más eficiente?
- ¿Cómo se va a cerrar la actividad?

Gracias



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