The Spoken Tutorial Project

- Self-explanatory: uses simple language
- Audio-video: uses multisensory approach
- Small duration: has better retention
- Learner-centered: learn at your own pace
- Learning by doing: learn and practise simultaneously
- Empowerment: learn a new **FLOSS** (**F**ree/**L**ibre and **O**pen **S**ource **S**oftware)

Target Group

- Students, teachers and teacher educators, researchers to explore various branches of mathematics.

Workshops

The Spoken Tutorial Project Team conducts workshops on Applications of GeoGebra and other FLOSS using spoken tutorials and gives certificates to those who pass an online test. For more details, please visit https://spoken-tutorial.org

Forum

We have developed a beginner friendly Forum to answer specific questions pertaining to any part of a particular tutorial.

For more details, please visit https://forums.spoken-tutorial.org.

The Spoken Tutorial Project
is funded by the
National Mission on Education through
Information and Communication Technology,
Ministry of Human Resource Development,
Government of India.

Contact us

Email: contact@spoken-tutorial.org
Website: https://spoken-tutorial.org

Forum help available to all learners

Content available in 22 Indian languages

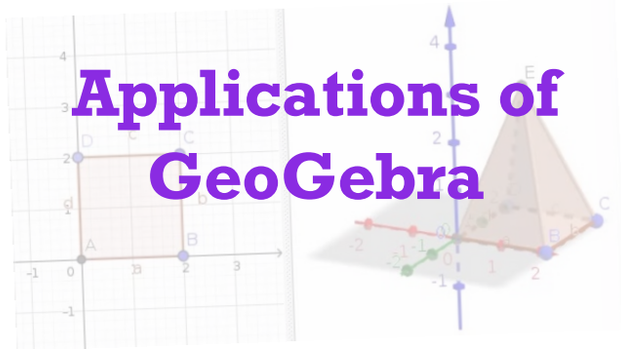
IIT Bombay

Spoken Tutorial

https://spoken-tutorial.org

Scan the QR code to visit Spoken Tutorial website

Applications of GeoGebra



National Mission on Education through Information and Communication Technology (NMEICT)
www.sakshat.ac.in

Funded by MHRD, Government of India.

Introduction

GeoGebra is a dynamic and interactive Mathematics software for everyone.

It brings together Geometry, Algebra, Calculus, spreadsheets, graphing, statistics and probability applications into a single package.

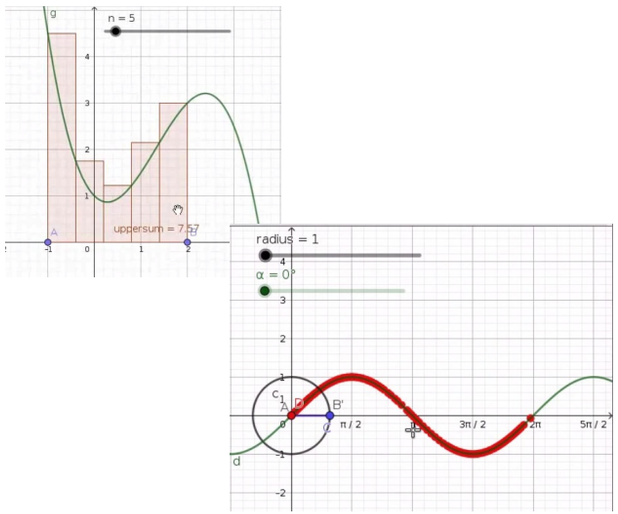
GeoGebra is available for Windows, mac OS and Linux.

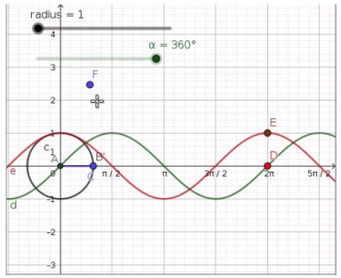
GeoGebra has tablet apps for Android, iPad and Windows.

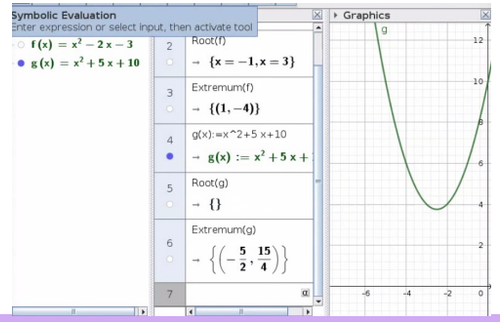
Its web app is based on HTML5 technology.
http://www.geogebra.org/

Download and Installation

It is freely available for download at
www.geogebra.org







Features

- In GeoGebra, Geometry, Algebra , Spreadsheet and 3D views are connected and fully dynamic.
- Entry of equations and mapping of various variables can be done using the tools, input bar, CAS view and spreadsheet view.
- Figures can be drawn using conic sections, inequalities, implicit polynomials and functions.
- Equations and coordinates can be entered and modified directly on screen or through Input bar.
- It has an ability to use variables for numbers, vectors and points.
- Finds derivatives and integrals of functions using the input bar.
- GeoGebra has a full complement of commands like Root and Extremum.
- It has 3D Graphics view to convert the 2D figures to 3D figures.

Benefits

- It allows interactive explorations by dragging objects and changing parameters.
- Interactive explorations can be done using the tools in 2D and 3D Graphics modes.
- Authoring tool to create interactive learning resources as web pages.
- It is written in Java programming environment.
- It is available in all the operating systems.
- Open source software, freely available from www.geogebra.org
- GeoGebra is tool for teachers to create interactive worksheets and learning materials.

Uses

- GeoGebra is simple and flexible in all its features.
- It provides free learning materials.
- Tools in GeoGebra are helpful in various constructions and calculations.
- Teachers and students can use GeoGebra to make conjectures.
- To understand how to prove geometric theorems.
- GeoGebra is a very useful tool to learn and teach different branches of mathematics.