About 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 practice
- Simultaneous empowerment - learn a new FLOSS

Target Audience

- Students
- Teachers and teacher educators
- Researchers to explore various branches of mathematics.

Workshop

The Spoken Tutorial Project Team conducts workshops on GeoGebra and other FLOSS using spoken tutorials and gives certificates to those who pass an online test.

For more details, please write to

contact@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

Spoken Tutorial

https://spoken-tutorial.org

GeoGebra

Introduction

- GeoGebra is a dynamic and interactive Mathematics for Everyone.

- It brings together Geometry, Algebra, Calculus, spreadsheets, graphing, statistics and probability applications in 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 http://www.geogebra.org.
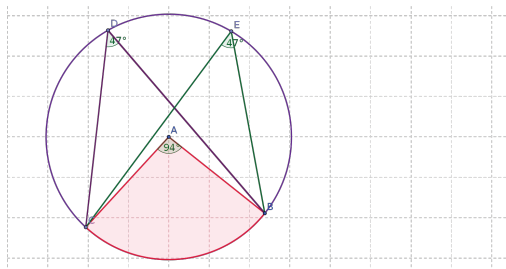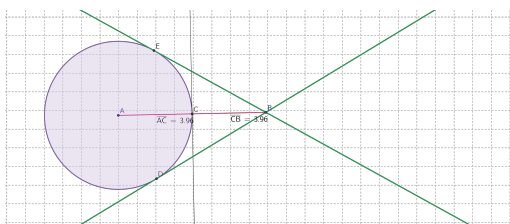
Features

- In GeoGebra, Geometry, Algebra and Spreadsheet are connected and fully dynamic
- It has easy to use interface with powerful features
- Constructions can be made with points, vectors, segments, lines, polygons.
- Figures can be drawn using conic sections, inequalities, implicit polynomials and functions.
- Figures and constructions can be changed dynamically.
- Equations and coordinates can be entered and modified directly on the screen or through Input bar.
- It has the ability to use variables for numbers, vectors and points.
- Finds derivatives and integrals of functions using the input bar
- GeoGebra has the ability to use variables for numbers, vectors and points, find derivatives and integrals of functions and has a full complement of commands like Root or Extremum.
- It has a CAS view and 3D Graphics view
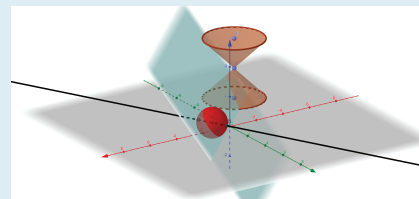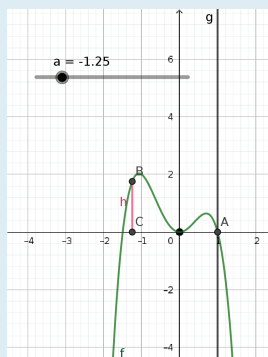
Benefits

- 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 like web pages
- The GeoGebra software is written in the Java programming environment.
  It is available in all the operating systems.
  Open source software, freely available from www.geogebra.org
- GeoGebra is a 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 and to understand how to prove geometric theorems.
- GeoGebra is a very useful tool to learn and teach different branches of mathematics.