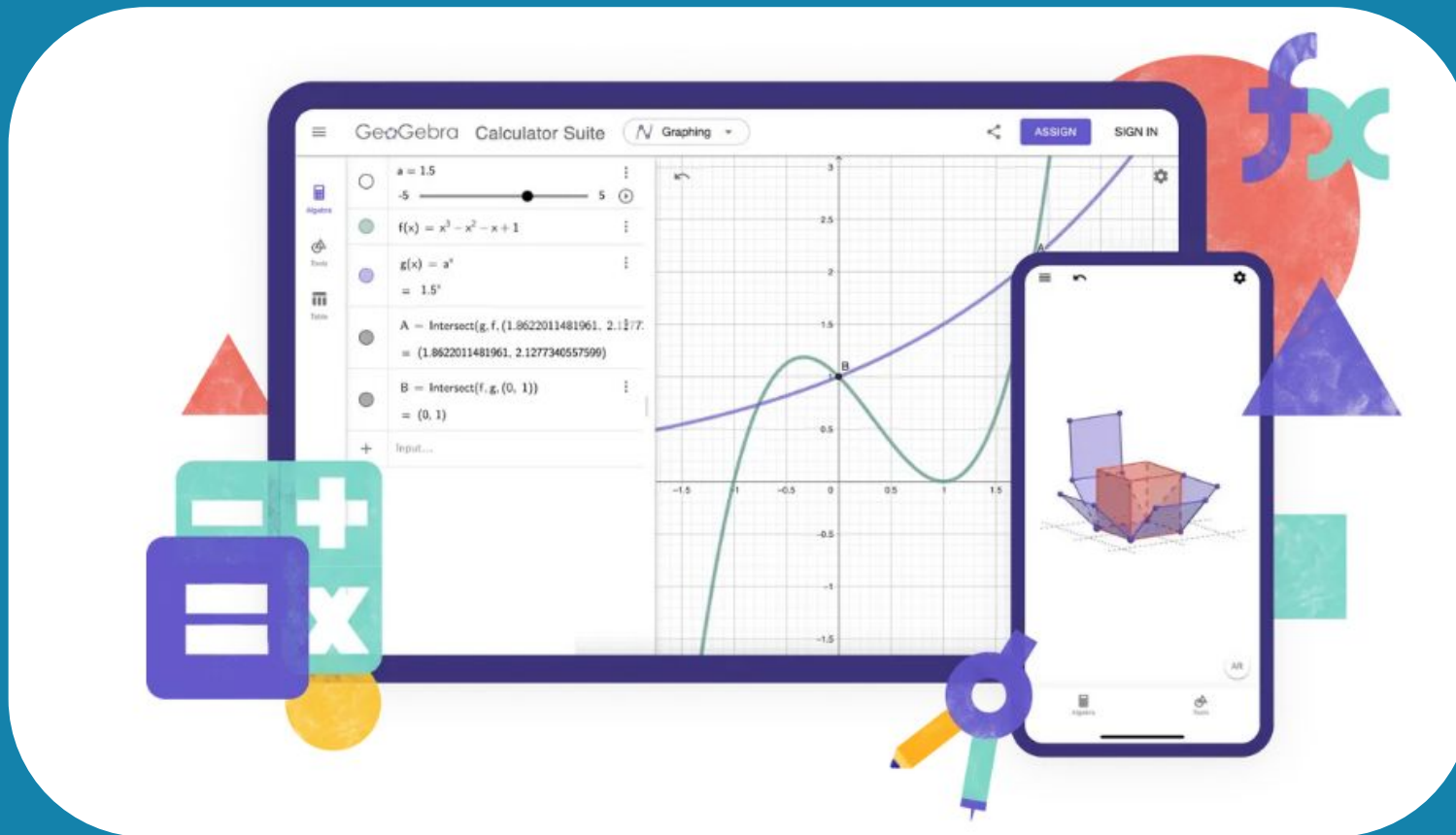


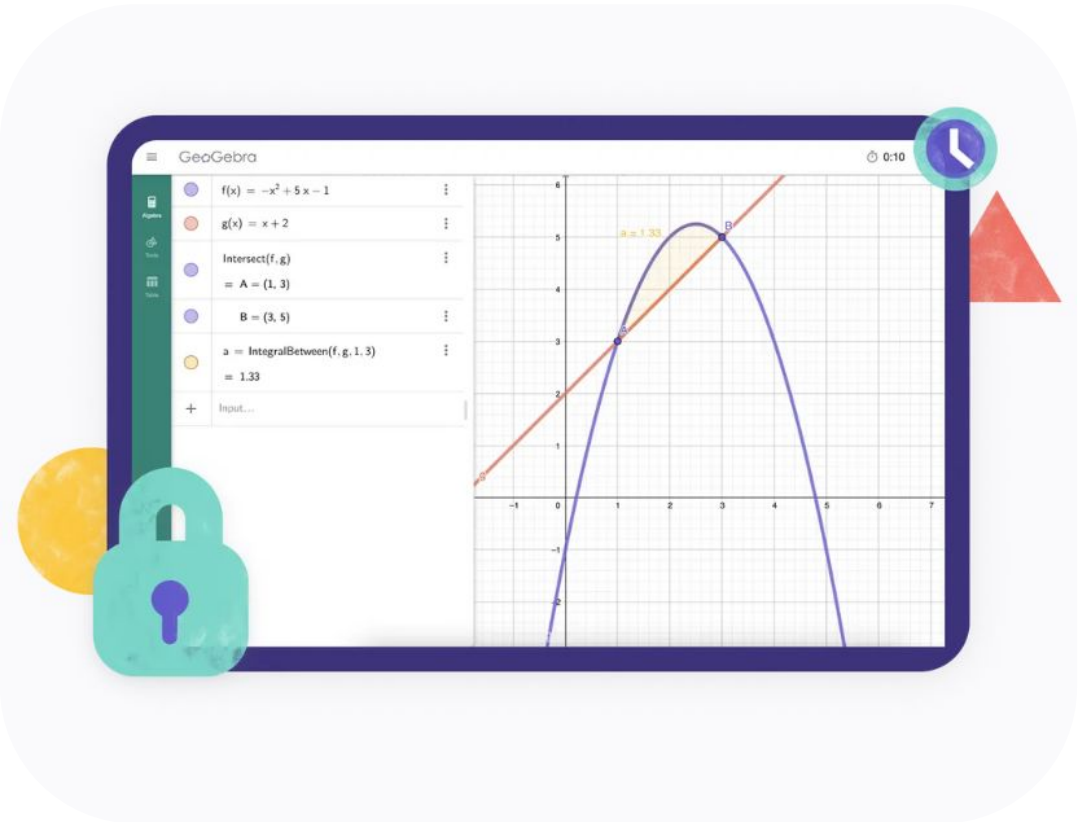
Welcome to GeoGebra

An effective tool for Interactive visualizations & problem-solving



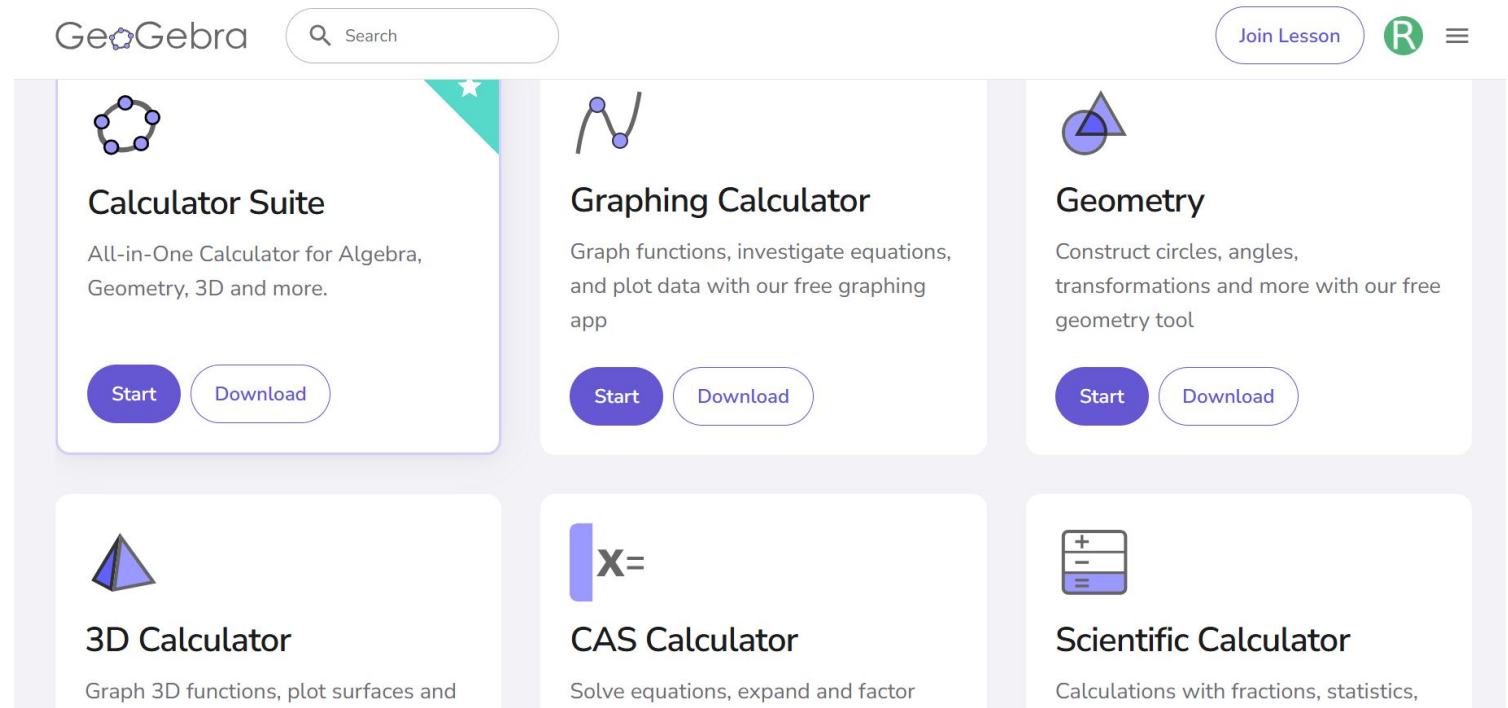
About GeoGebra

- ❖ Introduction
- ❖ System requirement
- ❖ Features of GeoGebra
- ❖ Benefits of using GeoGebra
- ❖ Applications of GeoGebra
- ❖ Example in Action
- ❖ Conclusion



Introduction

- ❖ GeoGebra is a **free software** designed to explore **mathematics** and **geometry**.
- ❖ It is an **interactive** platform that helps **visualize** graphs, shapes, and mathematical concepts.
- ❖ Available **both online** and **offline**, widely used in classrooms and self-learning.

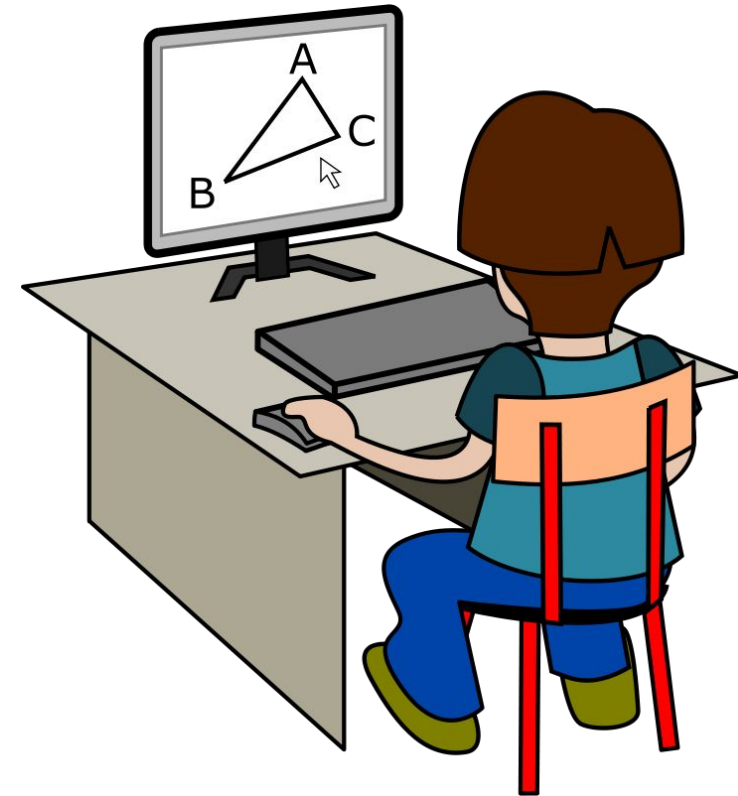


System Requirements

Desktop, Laptop, tablet or mobile

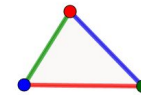
Internet connectivity

Modern web browsers like Google
Chrome, Mozilla Firefox, Microsoft Edge,
Opera



Features of GeoGebra

- ❖ **Graphing:** Plot and analyze functions and equations
- ❖ **Geometry:** Create and manipulate shapes and figures
- ❖ **Algebra:** Solve equations and expressions
- ❖ **3D Graphing:** Create and explore 3D graphs
- ❖ **Interactive:** Dynamic and engaging visualizations
- ❖ **Cross-Platform:** Available on desktop, mobile, and web



Resources ▴



Number Sense

Understanding numbers, their relationships and numerical reasoning



Algebra

Using symbols to solve equations and express patterns



Geometry

Studying shapes, sizes and spatial relationships in mathematics



Measurement

Quantifying and comparing attributes like length, weight and volume



Operations

Performing mathematical operations like addition, subtraction, division

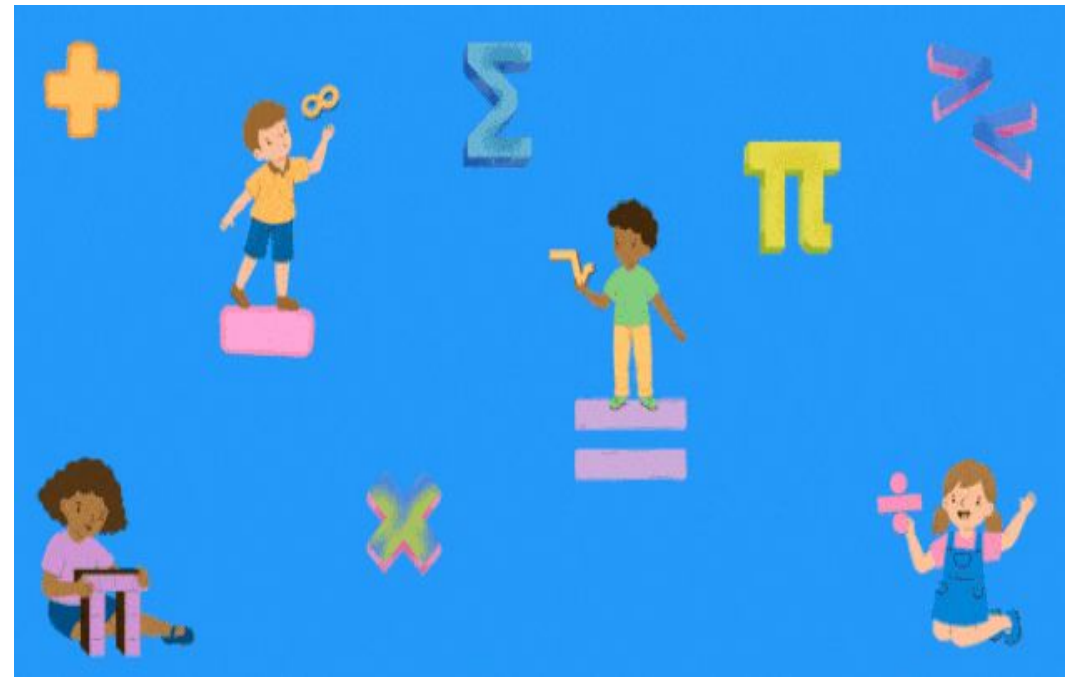


Probability and Statistics

Analyzing uncertainty and likelihood of events and outcomes

Benefits of Using GeoGebra

- ❖ Makes mathematics and geometry **easy to visualize**
- ❖ **Simplifies** complex problem-solving
- ❖ Provides an **engaging** and **interactive** learning experience
- ❖ Useful for both teaching and research purposes
- ❖ Supports **collaboration** and easy sharing of work
- ❖ Free and **accessible** globally



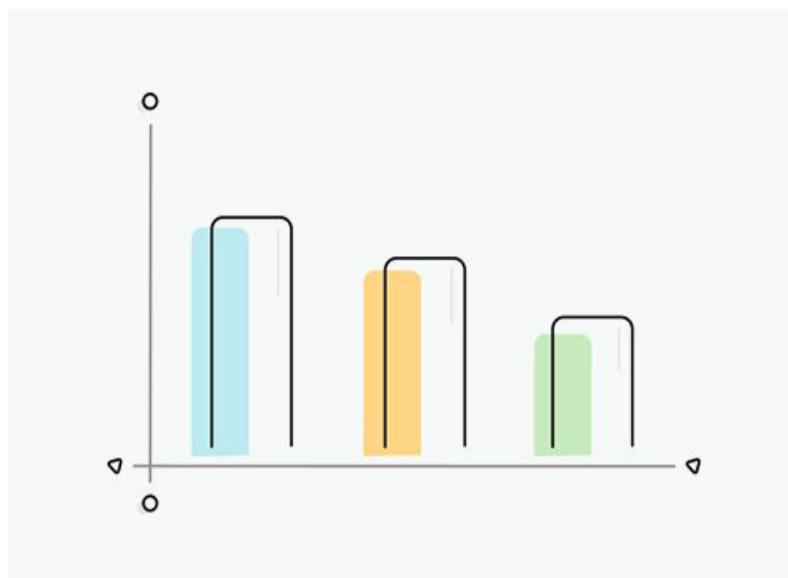
Applications of GeoGebra

- ❖ **Education:** Widely used to teach mathematics and geometry
- ❖ **Research:** Supports exploration of mathematical models and concepts
- ❖ **Problem-Solving:** Helps in solving complex mathematical problems
- ❖ **STEM Fields:** Applied in science, technology, and engineering
- ❖ **Global Usage:** Adopted in schools, universities, and online learning platforms

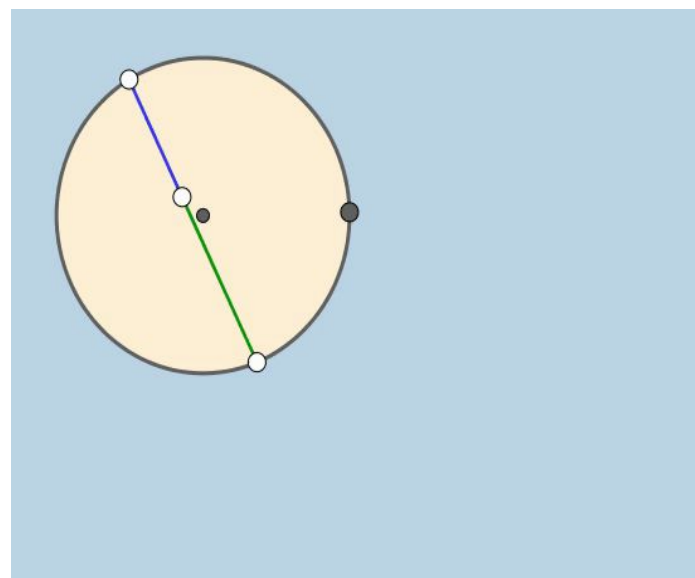


Examples of GeoGebra in Action

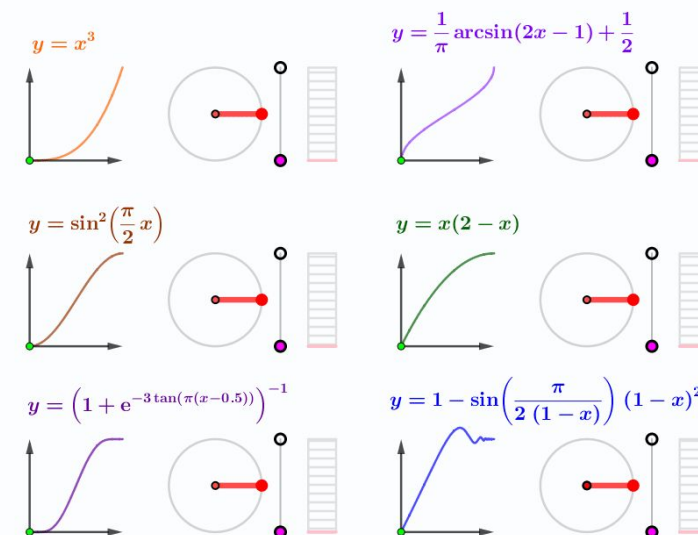
❖ Graphs of functions and equations



❖ Geometric shapes and constructions



❖ Algebraic equations and solutions



Conclusion

- ❖ GeoGebra is a powerful and versatile tool for exploring mathematics and geometry.
- ❖ Its features, accessibility, and global adoption make it valuable for education, research, and problem-solving.
- ❖ A go-to resource for students, teachers, and professionals in STEM.

