



Materials

GeoGebra Classic

Downloads

### **Presenters**

- Jen Silverman (@jensilvermath) Independent Math Curriculum and Technology Consultant, ProRadian Protractor Inventor, Illustrative Mathematics 6-8 Math Digital Lead, 14-year classroom veteran.
- Tim Brzezinski (@dynamic\_math) Independent Math-Ed Consultant, Accredited GeoGebra Trainer/Author, Math Adjunct at Central Connecticut State University.
- Steve Phelps (<u>@giohio</u>) Mathematics Teacher (26 years), Madeira High School in Cincinnati. Cincinnati Math Teacher's Circle leader, workshop presenter and trainer, author, T<sup>3</sup> National Instructor.

### Goals

- Introduce you to GeoGebra's <u>new</u> "unbundled" apps.
- Show you how to get started with the new GeoGebra apps.
- Encourage you to use one of the unbundled apps in one of your classes tomorrow.
- Convince you that "Yes, it's really THAT easy!"

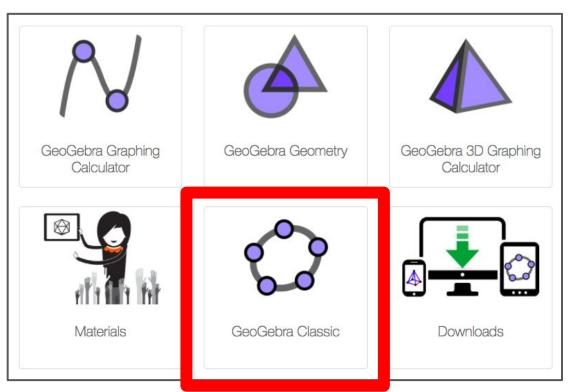
### A little history of GeoGebra

- GeoGebra has been around since 2007
  - <a href="https://www.maa.org/external\_archive/joma/Volume7/Hohenwarter/index.html">https://www.maa.org/external\_archive/joma/Volume7/Hohenwarter/index.html</a>
- Offices in Linz, Austria on the campus of Johannes Kepler University.
- Over 100 million unique visitors to <u>www.geogebra.org</u>
- Over 10 million active monthly users around the world.
- Over 1 million free interactive materials (i.e "resources").
- Free for students and teachers to use for non-commercial educational purposes

# GeoGebra "Classic" App

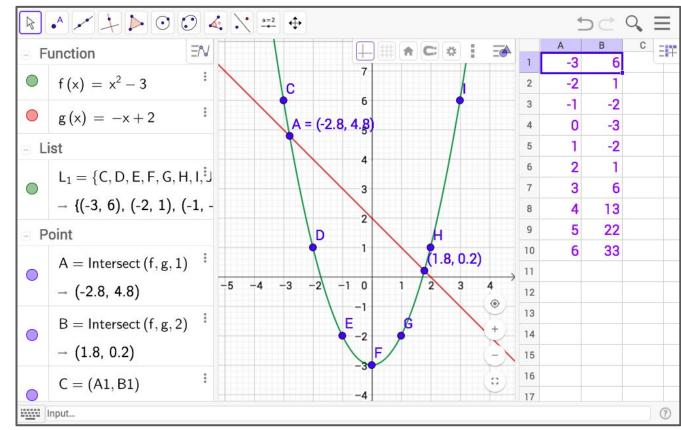
Available at

https://www.geogebra.org/home

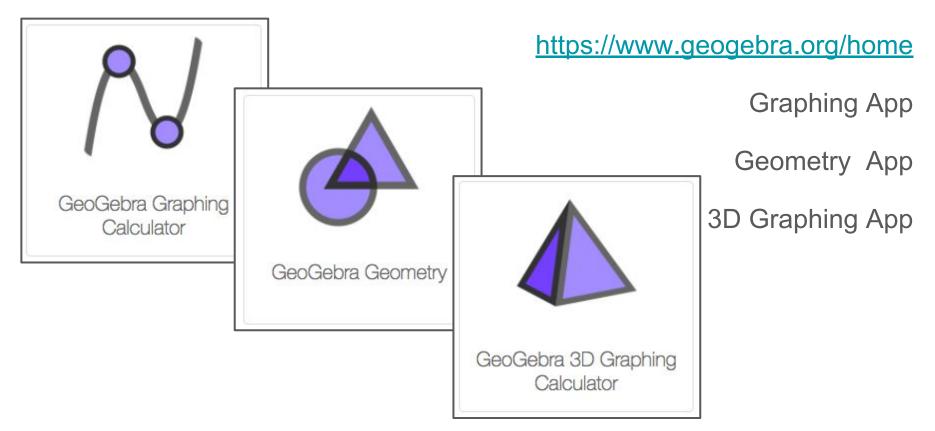


### GeoGebra "Classic" App

Brings together geometry, algebra, spreadsheets, graphing, statistics and calculus in one easy-to-use package.



# GeoGebra's "Unbundled" Apps



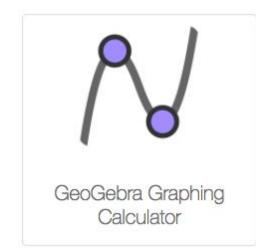
### Follow along if you want to...

- But you don't have to.
- Everything we will do starts from <a href="https://www.geogebra.org/home">https://www.geogebra.org/home</a>
- Demonstrating a few "highlights" of each app.
- Feel free to explore any particular app and post questions in the chat.
- We think you will find it's really THAT easy!

### **Graphing Calculator App**

Three things I would like to share:

- Graphing functions and using dynamic text.
- Getting to know the menus and tools.
- Curve-fitting, quickly and easily.



### Geometry App

Three things I would like to share:

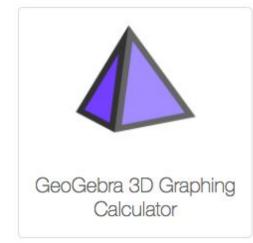
- Quick Discoveries of 2 Geometry Theorems (from scratch)
- Authentic Application Ex: Analyzing Locations of 2 Competing Businesses (Lowe's and Home Depot) within a geographical area
- Transformational Geometry Tools



### 3D Graphing App

Three things I would like to share:

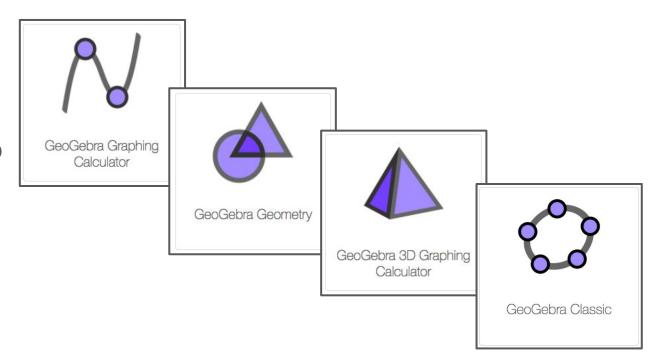
- Creating polyhedron and nets.
- Graphing lines, planes, and other surfaces.
- Surface of revolution for calculus.



### In closing - four powerhouse apps

Bookmark <a href="https://www.geogebra.org/home">https://www.geogebra.org/home</a>

- Graphing App
- Geometry App
- 3D Graphing App
- Classic App

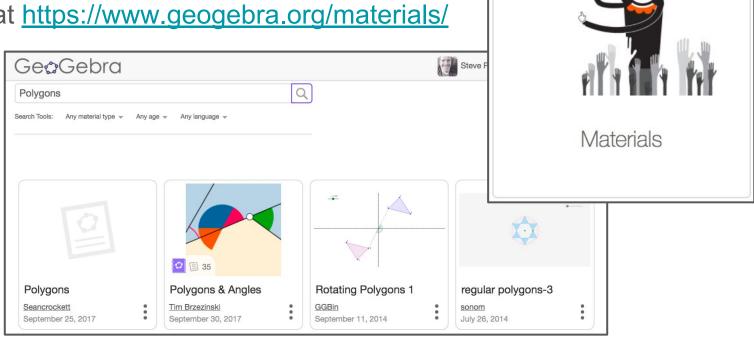


### In closing - learning more

- GeoGebra Blog: <a href="http://community.geogebra.org/en/">http://community.geogebra.org/en/</a>
- Quickstart Tutorials: <a href="https://wiki.geogebra.org/en/Tutorials">https://wiki.geogebra.org/en/Tutorials</a>
- User Forum: <a href="https://help.geogebra.org/">https://help.geogebra.org/</a>
- User Manual: <a href="https://wiki.geogebra.org/en/Manual">https://wiki.geogebra.org/en/Manual</a>
- YouTube Channel: <a href="https://www.youtube.com/user/GeoGebraChannel">https://www.youtube.com/user/GeoGebraChannel</a>
- Graphing App Tutorials: <a href="https://www.geogebra.org/m/EF8UvXvG">https://www.geogebra.org/m/EF8UvXvG</a>
- Exam Mode: <a href="https://www.geogebra.org/exam">https://www.geogebra.org/exam</a>

# In closing - searching for resources

You can search over a million free and interactive resources at <a href="https://www.geogebra.org/materials/">https://www.geogebra.org/materials/</a>



### In closing - asking for help

Don't hesitate to ask us for help at any time!

- Jen Silverman @jensilvermath
- Tim Brzezinski <u>@dynamic math</u>
- Steve Phelps <u>@giohio</u>
- GeoGebra @geogebra
- #ggbchat

### In closing - our GeoGebra resources

- Jen Silverman <a href="https://www.geogebra.org/jennifer+silverman">https://www.geogebra.org/jennifer+silverman</a>
- Tim Brzezinski <a href="https://www.geogebra.org/tbrzezinski">https://www.geogebra.org/tbrzezinski</a>
- Steve Phelps <a href="https://www.geogebra.org/stevephelps">https://www.geogebra.org/stevephelps</a>

# On behalf of Jen, Tim, and Steve



# Jank



