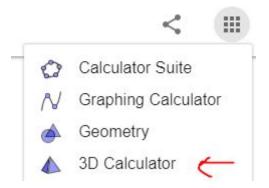
Name: Date:

## Cylinder

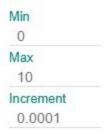
- **1.** <u>Set-Up:</u> Go to geogebra.org and sign in using your Google email and password. Create an account (this will allow you to save your work!). Make sure to uncheck the boxes on the bottom so that you don't receive emails from the website.
  - Click on +NEW and choose GeoGebra Math Calculators.
  - Select the 3D calculator option:



• Create a slider to manipulate the radius of the cylinder:



- Click on the "3-dots" at the top right corner and select "Settings"
- Go to the "Slider" tab and set the following to these settings:



• Create a point of origin:

```
origin = Intersect(zAxis, xAxis)
\rightarrow (0, 0, 0)
```

• Create an initial point that corresponds with the radius slider:

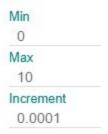
```
Radius = (r, 0, 0)

\rightarrow (0, 0, 0)
```

• Create a slider to manipulate the height of the cylinder:



- Click on the "3-dots" at the top right corner and select "Settings"
- Go to the "Slider" tab and set the following to these settings:



## 2. Creating a Cylinder

- Make sure the slider is GREATER than 0. Switch from "Algebra" mode to "Tools" mode on the purple top-bar.
- Click on "MORE" at the bottom of the Basic Tools.
- Scroll down to the "Solids" section and click on the Cylinder Tool



 First, Select the Point of Origin (the point where the center will be) and the Point Height (the point corresponding to the cylinder's height) • Finally, input the value for the radius slider "r"

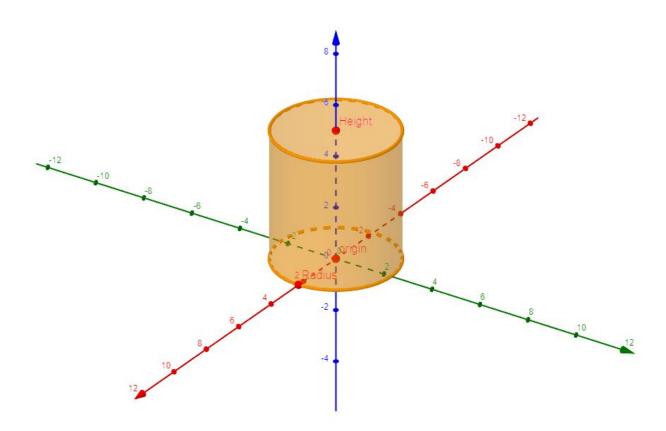
## Cylinder

Radius

r

OK CANCEL

• Hit "OK" and go back to "Algebra" mode and manipulate the sliders "r" and "h" these will be the radius and height of your cylinder



**3.** Saving your Object: Select the "3-Lined Menu" icon on the top left corner and make sure to SAVE! Share your object by clicking the "Share" option and copying the link to send it to the recipient.