How To Make a 3-D Figure with Net in GeoGebra

1. Go to https://www.geogebra.org and select GeoGebra Classic



2. Select **Point** and place 2 points **anywhere** on the grid





3. Select Regular Polygon and click on the 2 points you plotted.



4. Enter the number of vertices for your desired polygon (ex. 3 for triangle, 4 for quadrilateral, etc) and click **ok**. For this demo I am choosing 4 vertices.



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6. Make the area of the 3-D window larger by dragging the line connecting the 2-D and 3-D windows. Then select **extrude to prism or cylinder** and click on the polygon in the 3-D view (notice that you can create other 3-D shapes from this menu). Next enter the desired **altitude** (height) measure. For this demo I am using 3. Click ok.





7. Select 12 and 22 Net then click on the polygon in the 3-D window.

8. Close Algebra View:



9. **Right-Click** in the **2-D** window and uncheck **axes** and **grid**. Right-click in the **3-D** window and uncheck **axes**.



10. Now you have created a rectangular prism (3-D view) and its net (2-D view). Move the **slider** to open and close the net.



11. Changing the color of the net: Click on a piece of the net that is NOT the base in 2-D view and then click on the colored square that the red arrow below is pointing at. Choose the desired color and darken or lighten the shade with the slider below the color choices. Repeat for all pieces of the net except for the bottom base.



Save your 3-D Figure and Net: Click the full screen button and take a screen shot. Paste the screenshot to a google doc and share with final product with Ms. Blight.
OR

Print your 3-D Figure and Net: Click the full screen button and take a screenshot. Paste to google doc and email to <u>blighc@nv.ccsd.net</u>. Include in the subject line of the email your name, period number and the word print (ex. Mary Smith, p.1, print). I will print them out for you by the next class period.



