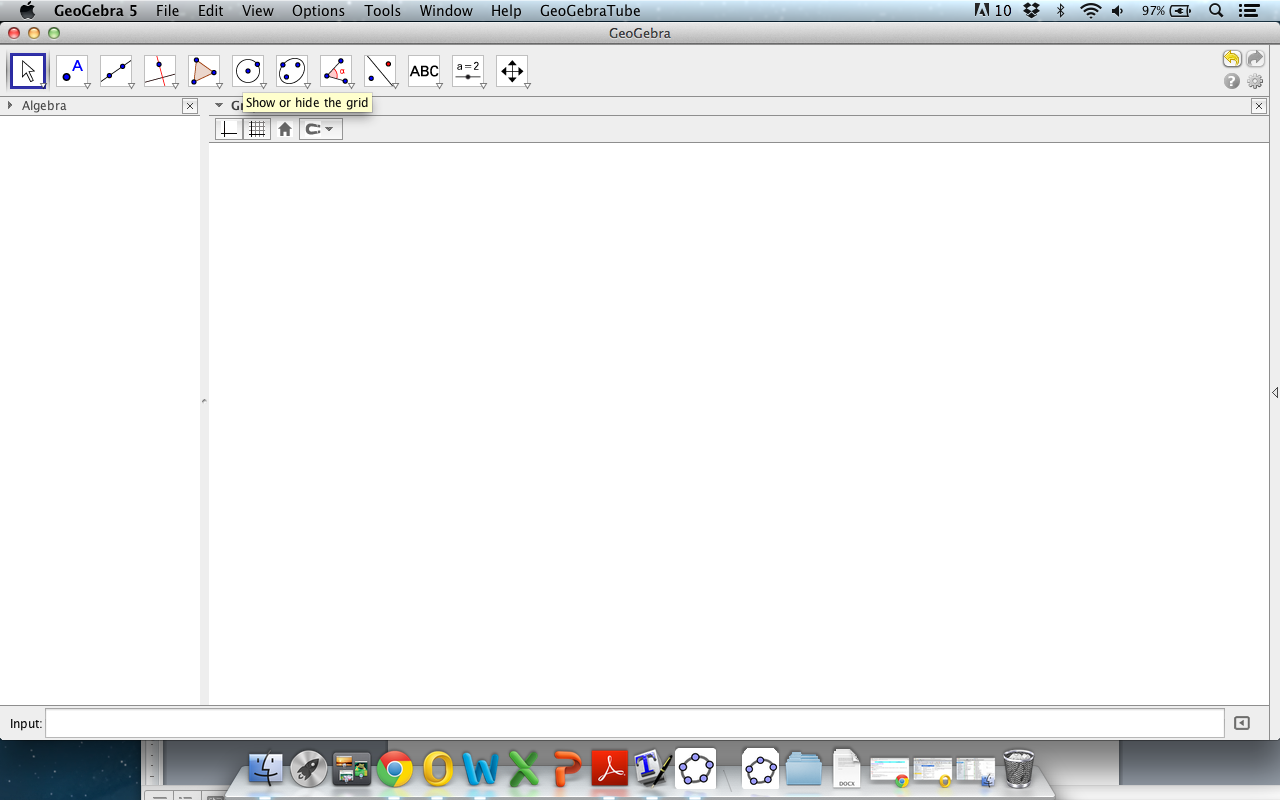
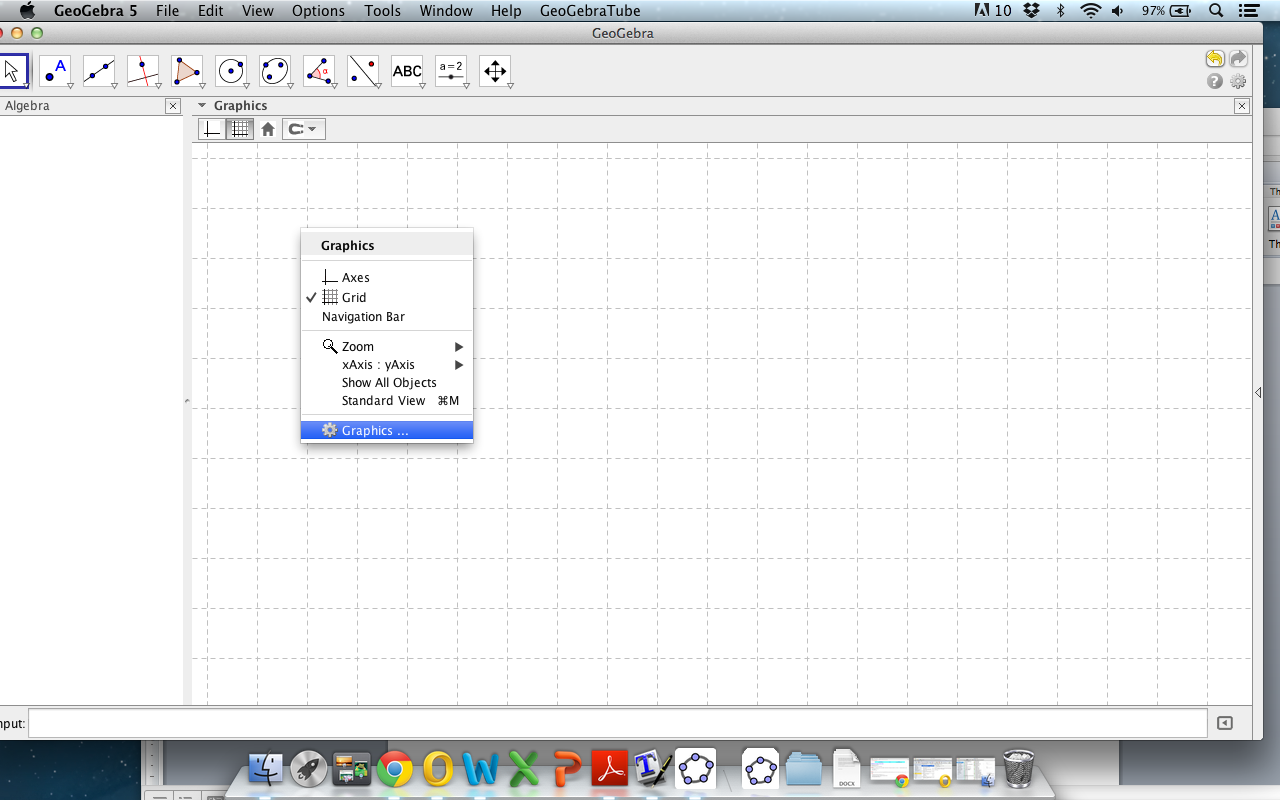
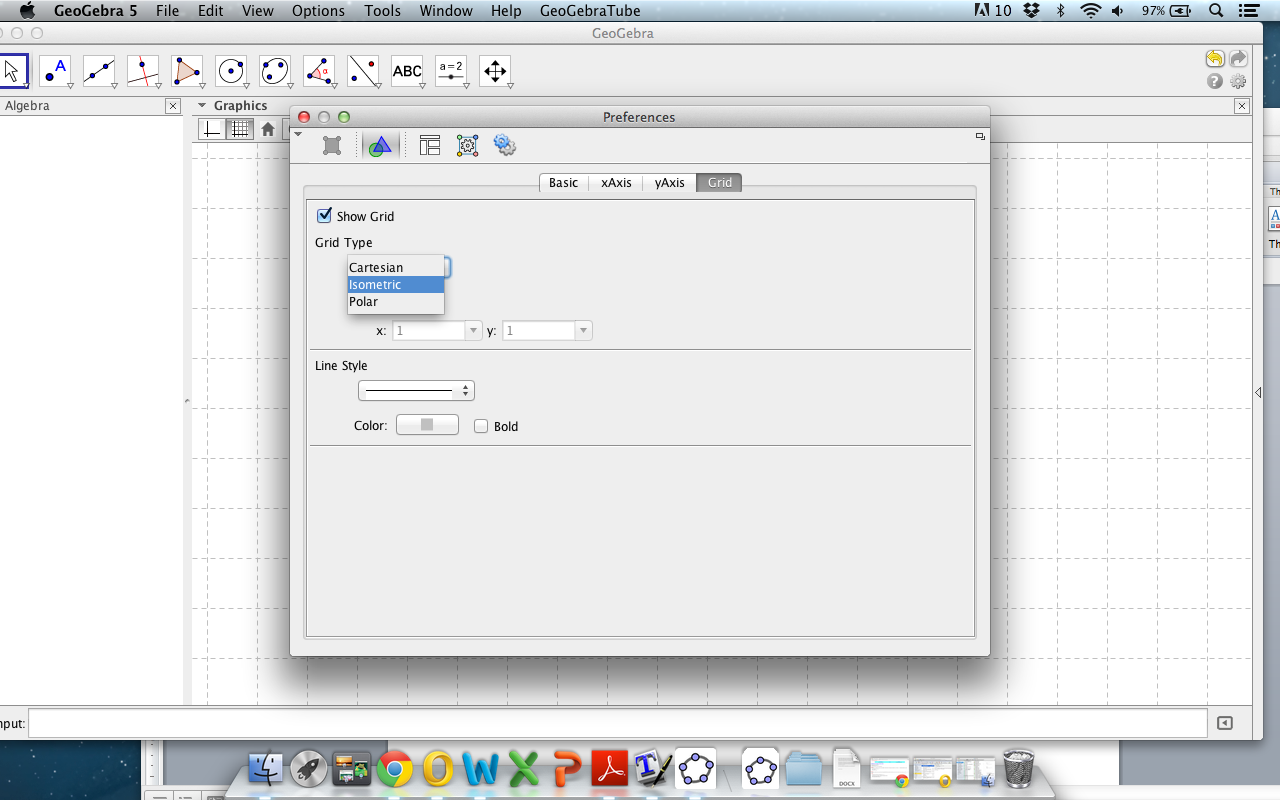
**Activity 6.1.2b Isometric Perspective Drawing**



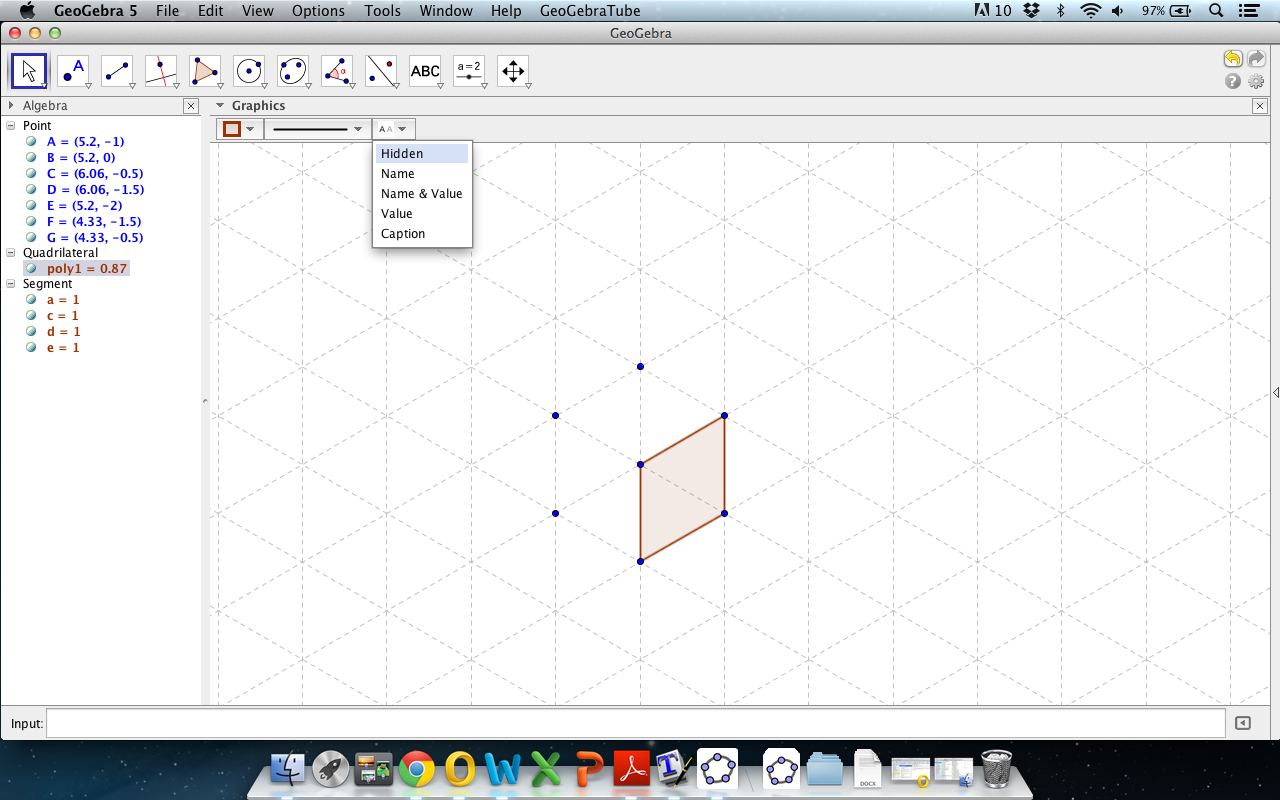
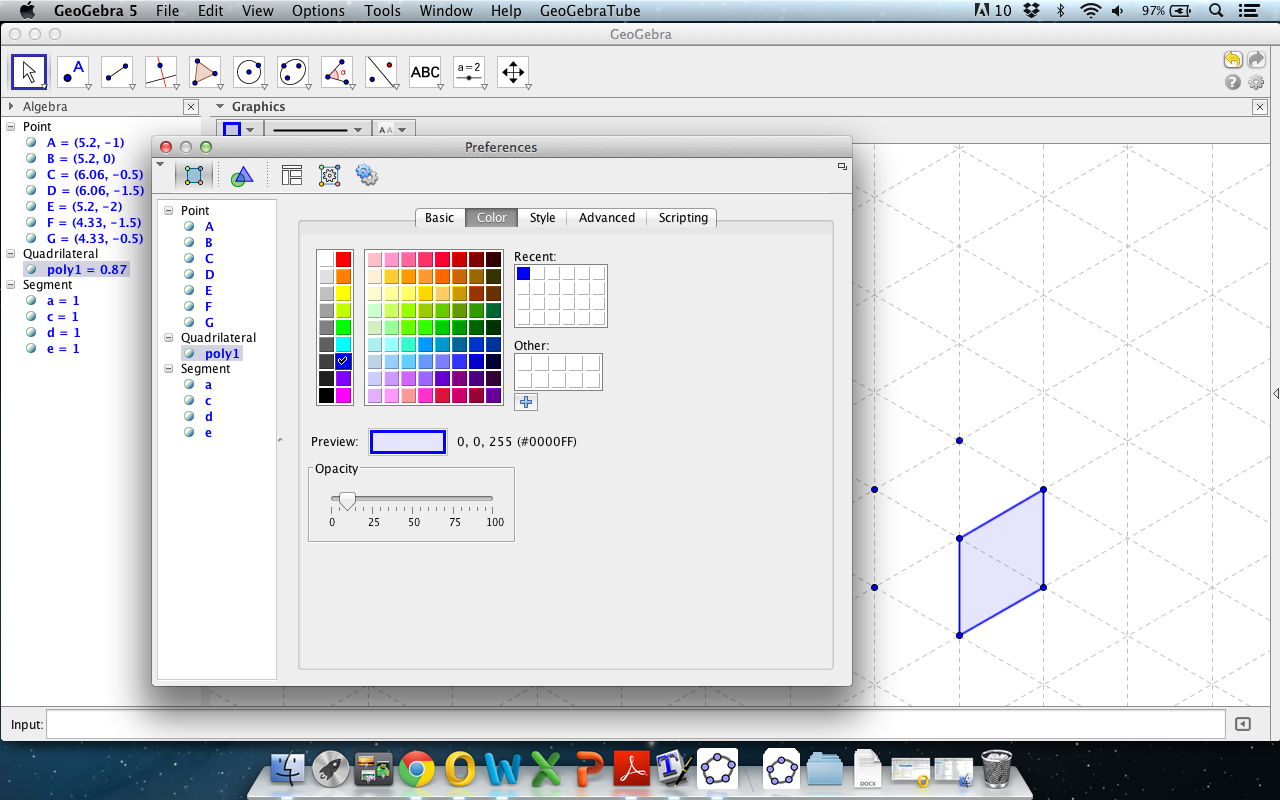
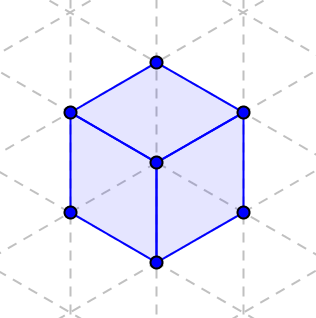
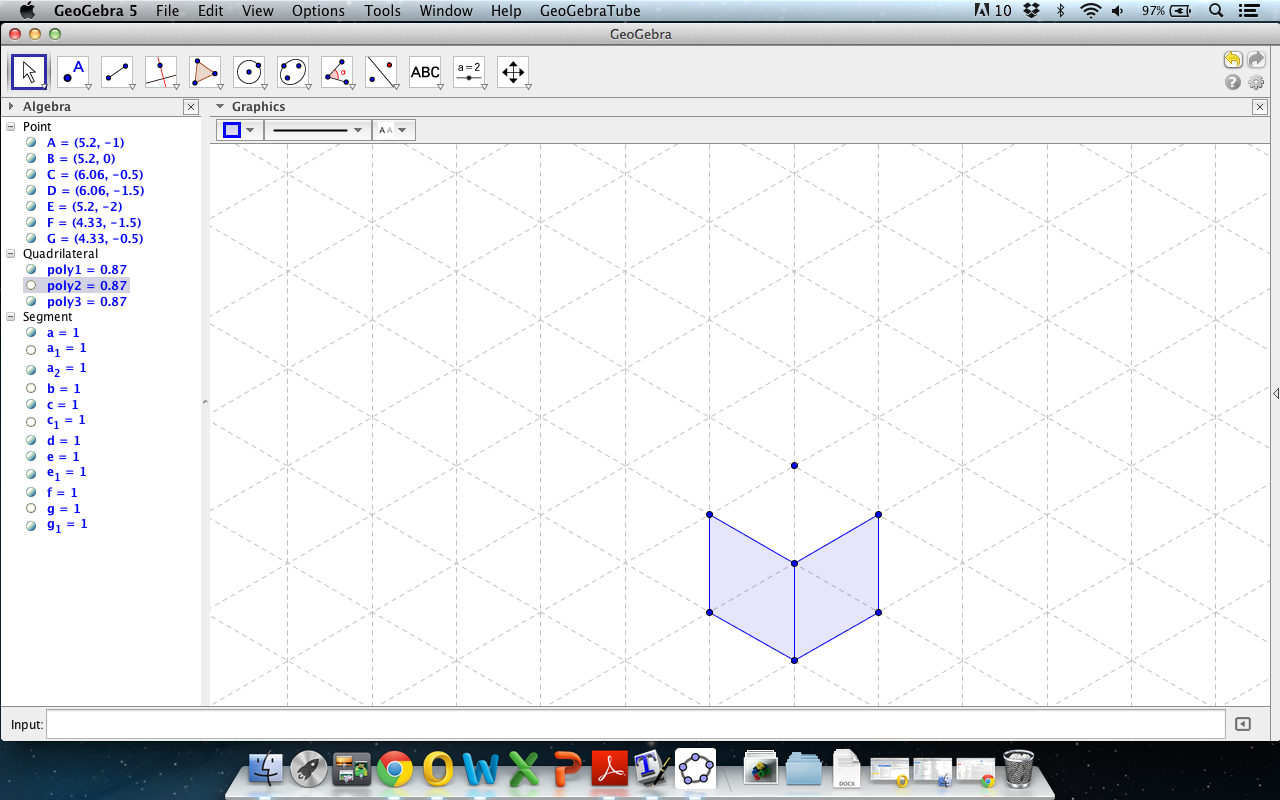
Use GeoGebra for this activity.

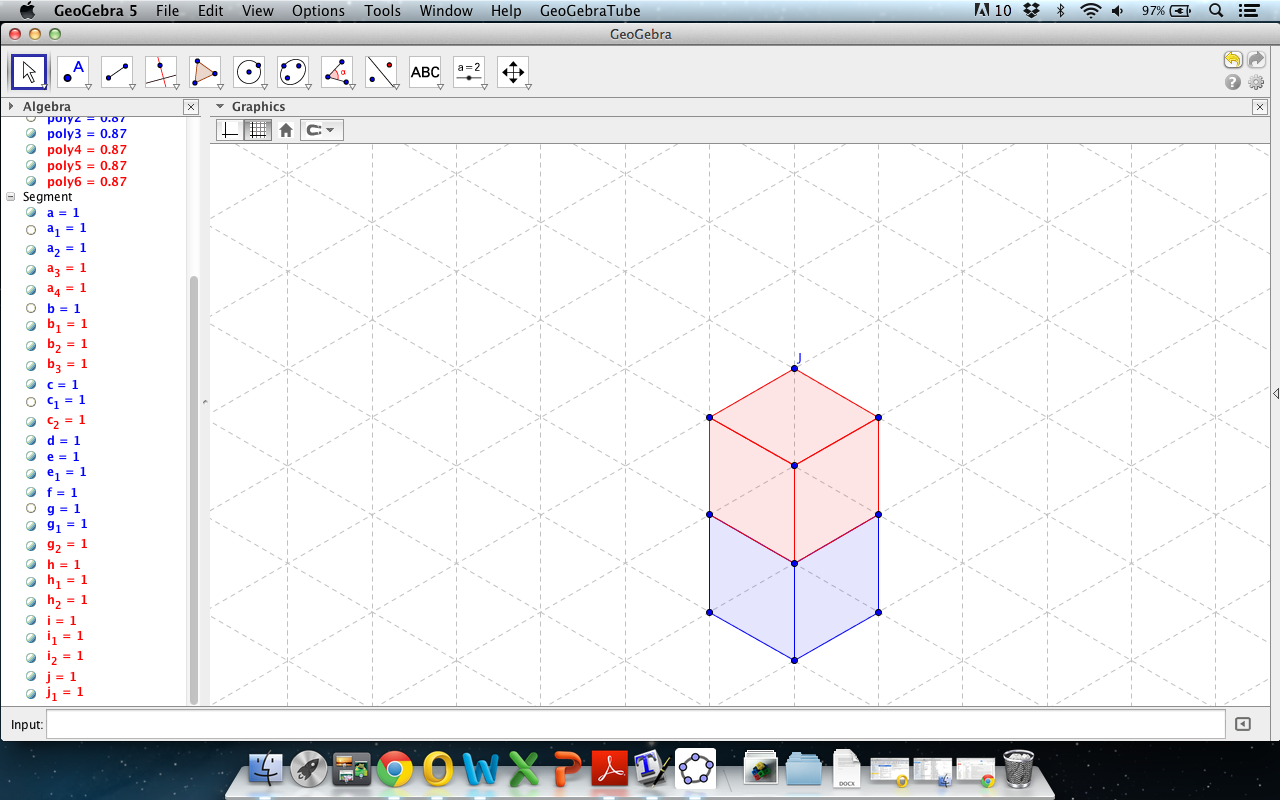
1. Make sure you start in the Graphics view.
2. Click the drop down arrow to the left of the word “graphics” and select the grid paper icon.
3. Select “snap to grid” under the magnet icon.
4. Right click in the graphics screen and select graphics. (Control-click on a Mac).



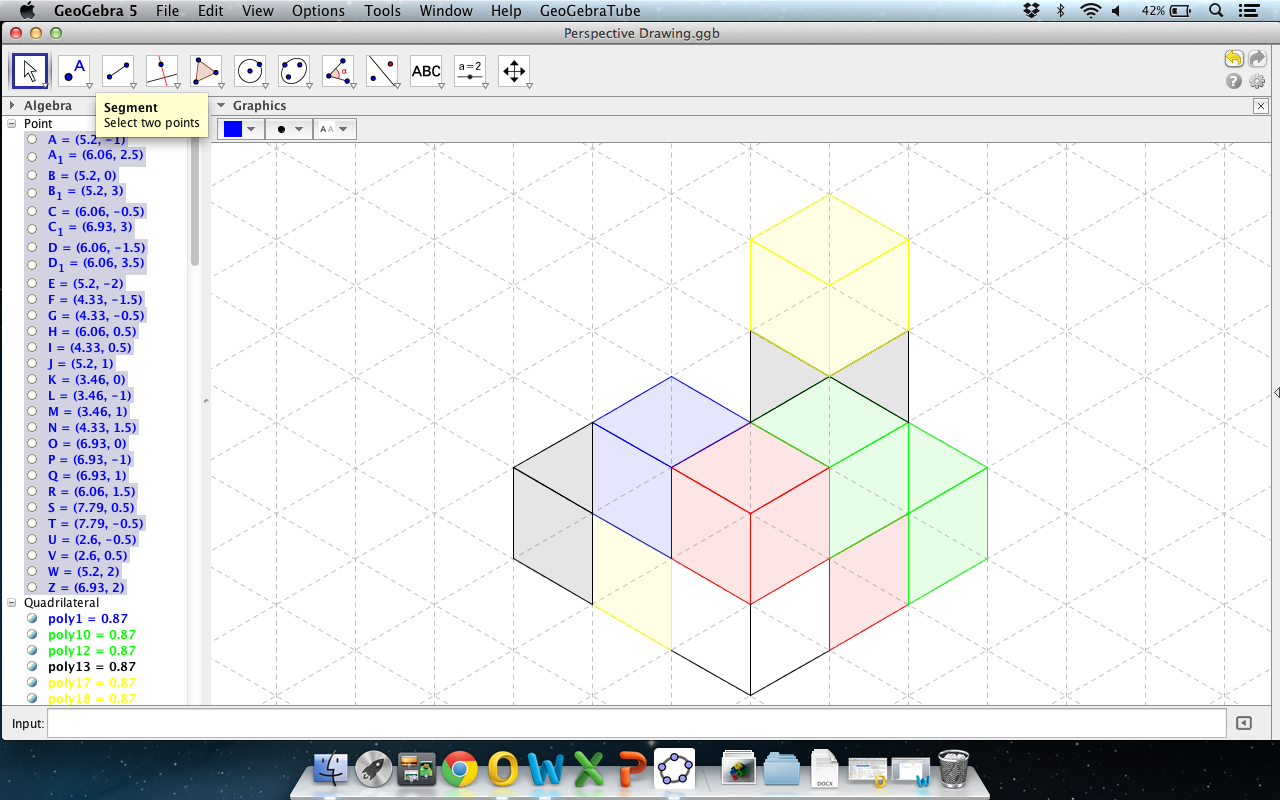
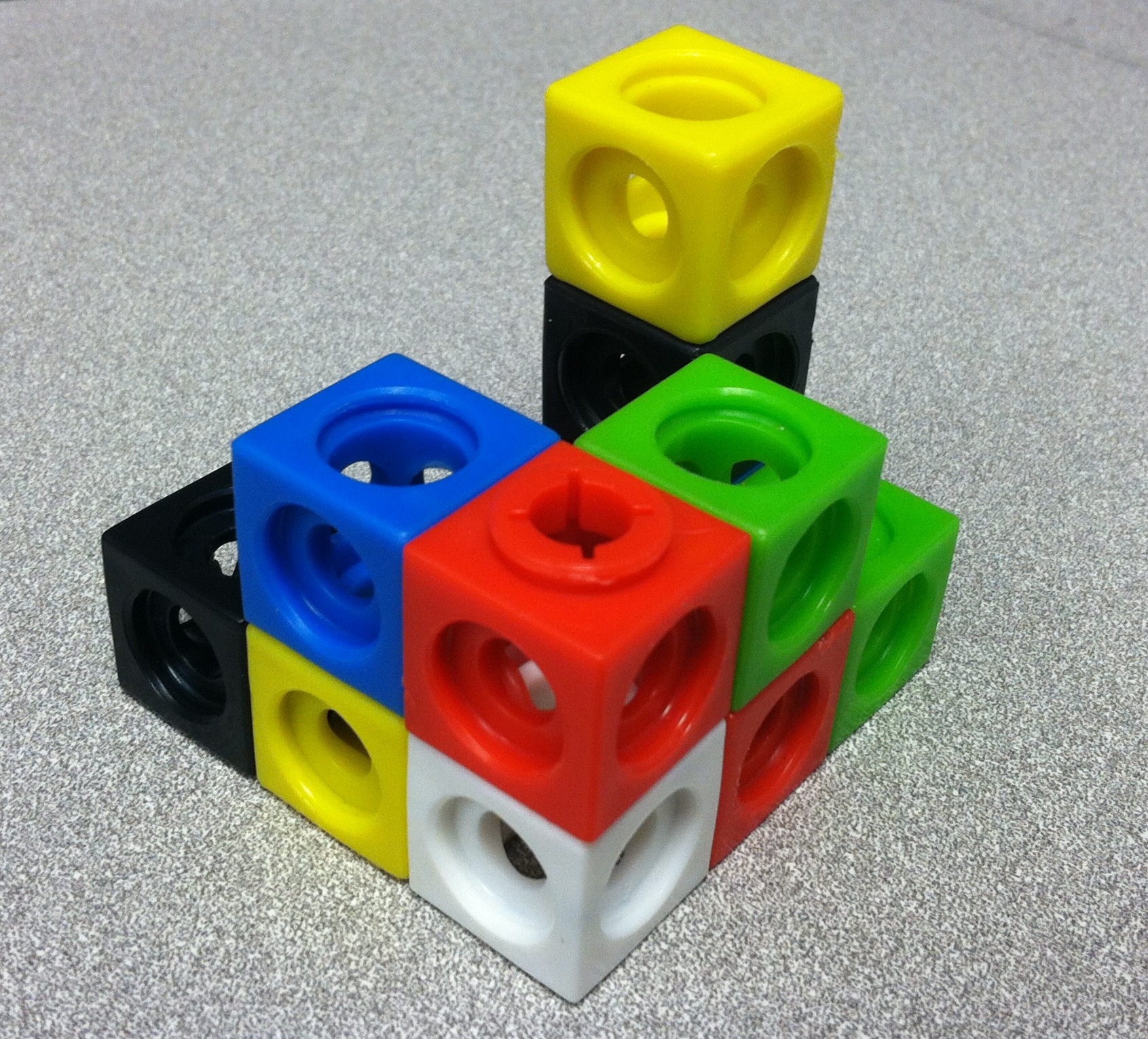
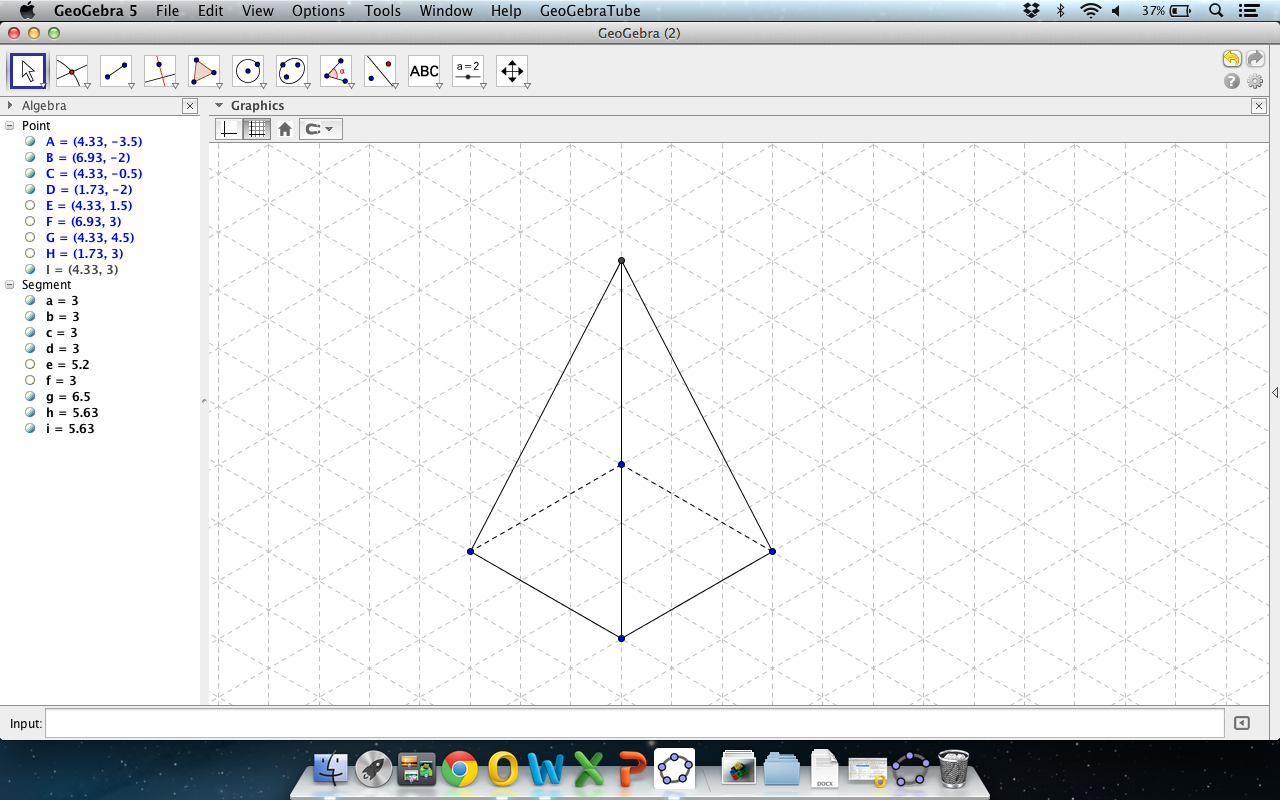
1. Under the Grid tab change Grid type to Isometric.



1. Turn off labeling of objects by going to the Options menu, selecting Labeling and checking “no new labels.”  
     
   Use the point tool to locate the seven vertices of a cube. (Actually there are eight, but the point in the center represents both the visible upper front corner and the lower back corner, which is hidden from view.)
2. Use the polygon tool to draw one face. In two-dimensions it is a non-square rhombus, but in our drawing it will represent the square face of a cube.
3. To change the color of the face, right click on polygon. Select object properties; then select color and opacity. Complete all three faces of the cube.
4. Here is how to draw a cube connected to an already drawn cube.  
   1. First delete the face that the two cubes share.



* 1. Then locate additional vertices for the second cube and use the polygon tool to draw the faces. Use a different color to distinguish the two cubes.

1. Now draw a non-convex shape made up of small cubes, like the one shown below. Your teacher may give you a model to work with.
2. For further exploration of isometric drawing, try drawing pyramids and prisms with specific dimensions. (Below is a pyramid with a 3 x 3 square base and height 5.)
3. Print your results and share them with your teacher and your classmates.