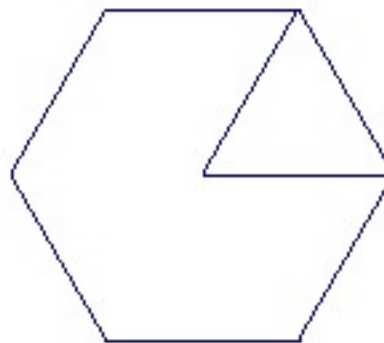
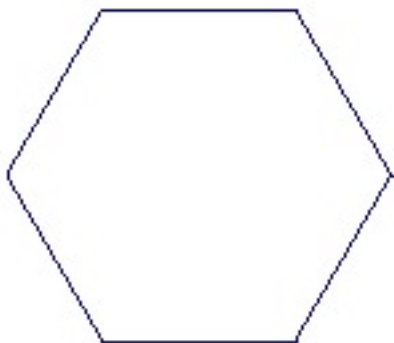


## Simple Kaleidoscopes

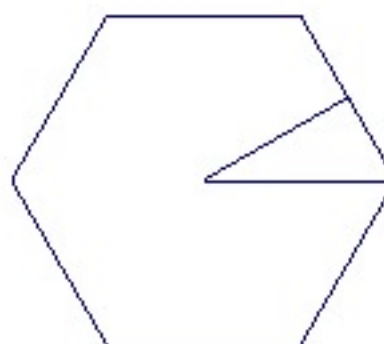
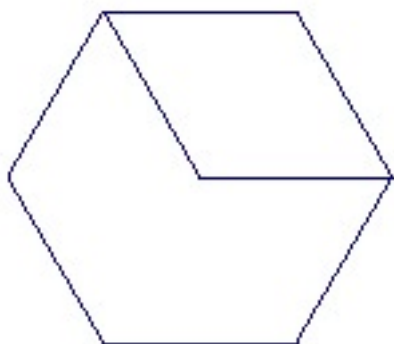
### Activity 1. Hexagon

Draw all the mirror lines of the hexagon.

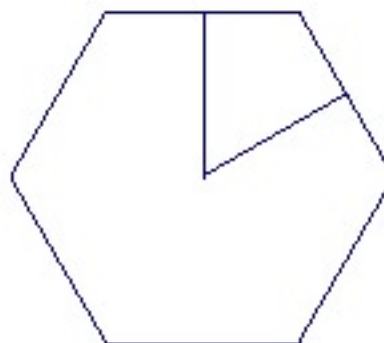
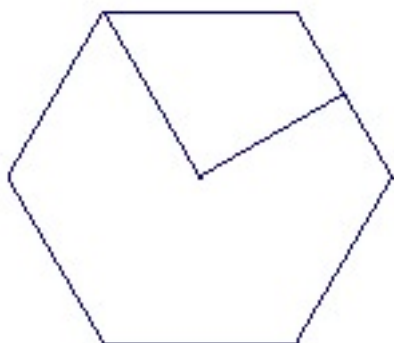


a) Place mirrors along two mirror lines, with the mirrors meeting at the center of the hexagon. If you look between the mirrors you should see the entire hexagon. Place a few tiny objects between the two mirrors. If you look you will see a pattern that is kaleidoscopic.

b) Place hinged mirrors along the lines indicated.



c) See whether you can reconstruct the whole hexagon by placing the hinged mirrors along the indicated lines.



d) *What can you say about the angles for which you can reconstruct the entire hexagon with the hinged mirrors?*