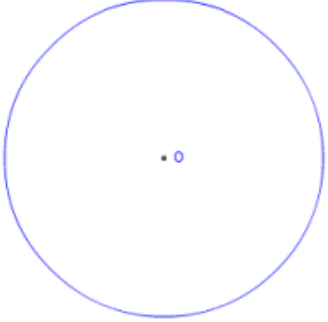
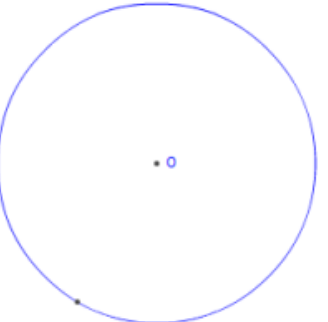
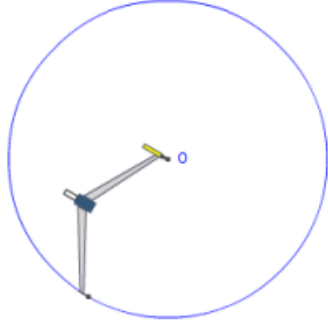
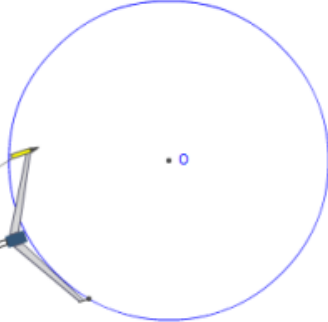
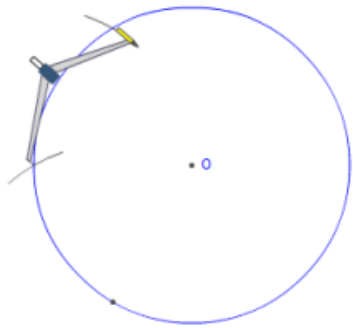
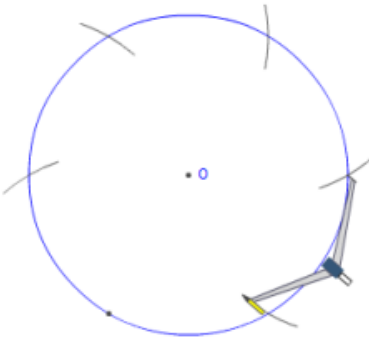
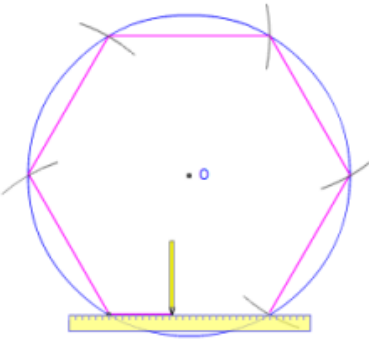


Regular hexagon inscribed in a circle

After doing this	Your work should look like this
<p>We start with the given circle, center O.</p> <p>Note: If you are not given the center, you can find it using the method shown in Finding the center of a circle with compass and straightedge.</p>	 A diagram of a circle with a center point labeled 'O'.
<p>1. Mark a point anywhere on the circle. This will be the first vertex of the hexagon.</p>	 A diagram of a circle with center 'O' and a single point marked on the circumference.
<p>2. Set the compasses on this point and set the width of the compasses to the center of the circle. The compasses are now set to the radius of the circle</p>	 A diagram of a circle with center 'O' and a marked point on the circumference. A compass is shown with one leg at the marked point and the other at the center 'O', indicating the radius is set.
<p>3. Make an arc across the circle. This will be the next vertex of the hexagon.</p> <p>(It turns out that the side length of a hexagon is equal to its circumradius - the distance from the center to a vertex).</p>	 A diagram of a circle with center 'O' and a marked point on the circumference. An arc is drawn from the marked point with a radius equal to the distance from the center to that point, intersecting the circle at a second point.

After doing this	Your work should look like this
<p>4. Move the compasses on to the next vertex and draw another arc. This is the third vertex of the hexagon.</p>	
<p>5. Continue in this way until you have all six vertices.</p>	
<p>6. Draw a line between each successive pairs of vertices, for a total of six lines.</p>	
<p>6. Done. These lines form a regular hexagon inscribed in the given circle.</p>	