1. Familiarize yourself with the applet. Drag the point around the circle until you feel comfortable with the lay out and how the applet works.  Before we start on the assignment, write down in your own words what a radian is? What does it represent?
2. Now lets take your definition of a radian and see if it was correct. Let's look back at the applet. Start by resetting the applet to the original figure by refreshing the page. Now take the point and drag it around the circle focusing on the green section. What do you notice about this section? What is changing? What is not changing?
3. Now take the point and drag it to each of the pink points. What do you notice about these pink points? (Hint look at the value of the radian measure.)
4. By dragging the points to each of the pink points, what do you notice about the arc length and radius of the circle?
5. Given what we have seen with the radian measure, arc length, and radius how do these measurements relate to each other?
6. Now click on the option in the applet that says ratio of arc length to radius and <AOB. Why do you think that the ratio of the arc length to the radius and <AOB have the same measure?
7. Given the two measurements of <AOB and the ratio of arc length to radius, are there any conjectures we can make about what a radian is and what it represents?