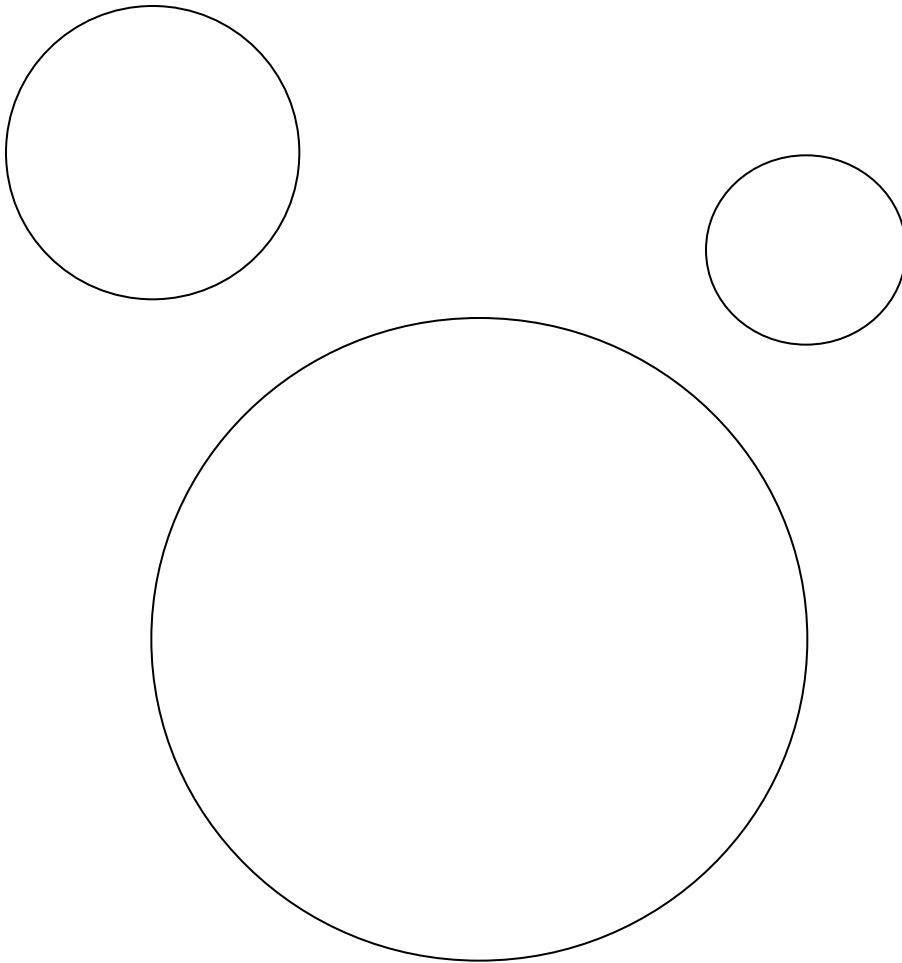


Geometry – Standard G.GMD.1 – Intro and Explore

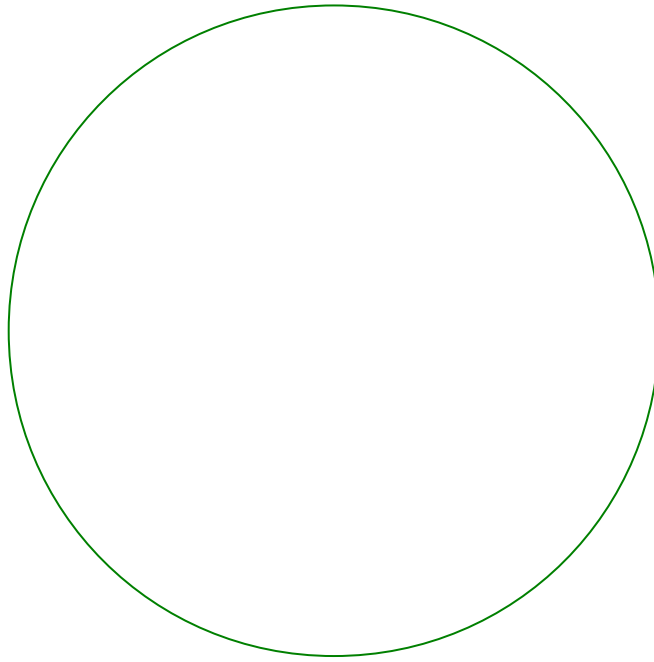
1. Do a little research (that is, read at least 3 sources). Write a tight, meaningful paragraph explaining pi (π). List your sources at the after your paragraph. If you are going to quote a source word-for-word, use quotation marks and attribute the writing to a human being. (“Wikipedia” doesn’t ever write anything.)

2. Using your measuring tools, verify the estimated value of π on the following circles.



Geometry – Standard G.GMD.1 – Intro and Explore

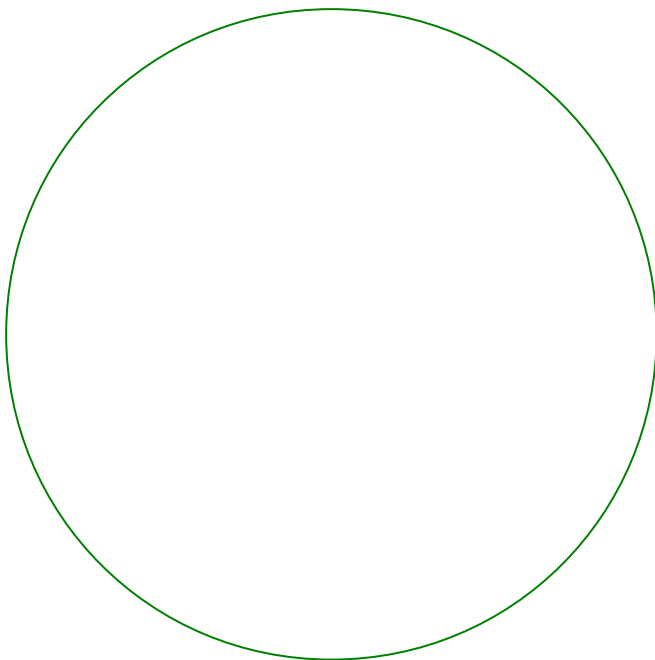
- Using whatever means necessary, find the EXACT center of the circle below. Explain your method.



- Verify that you have found the exact center by drawing and measuring 5 radii. What are the measurements of the radii?
- Suppose you weren't allowed to use the area formula. Find a way to estimate the area of that circle. Explain your method.

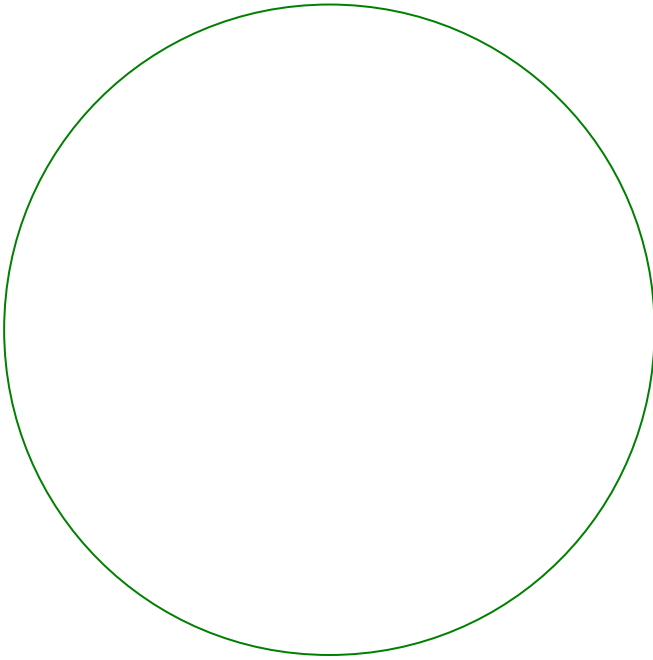
Geometry – Standard G.GMD.1 – Intro and Explore

6. According to the formula, multiplying the radius by 2 and then multiplying by π will give you the measure of the circumference of the circle. How does that make sense? Why do you think that works?
7. Now suppose that the circle were working with was the **base of a cylinder**. Calculate the... wait... wait... do you know what a cylinder is? Name 5 different cylinders that might be located at your house.
8. Great! Now we are ready for this. Calculate the... wait... jeez... okay. Before we get there, we should probably build a cylinder to look at. Here's that circle again. Cut it out. I'm not playing. Get some scissors and cut that circle out.



Geometry – Standard G.GMD.1 – Intro and Explore

9. Good. Now... whoops... wait, we are going to need a second one. Here, cut out a second one.



10. Awesome! Now we are almost ready. The only thing are missing is the stuff in between the cylinder. So, I want you to get a fresh sheet of printer paper and finish your cylinder making sure that it is 6 inches tall. Make it, tape it up and then move on. (I suppose you could decorate it if you want to be *that* student.)

- 11. Now, go to Moodle and look in Unit 6. Click the link “The Ritz Cracker Problem, Episode I.”**

As you watch the video, you’ll answer the questions on the next page.

