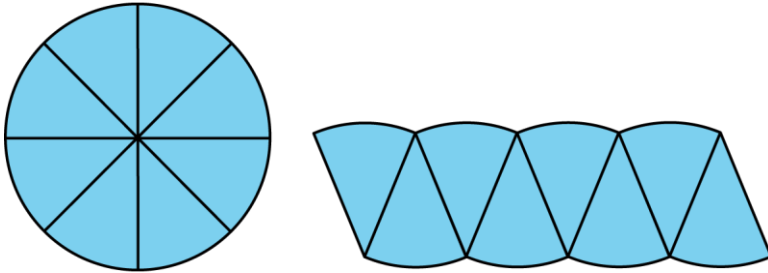Name_____

Date_____

1. The picture shows a circle divided into 8 equal wedges which are rearranged.

    The radius of the circle is r and its circumference is $2\pi r$. How does the picture help to explain why the area of the circle is πr^2?

2. Jada paints a circular table that has a diameter of 37 inches.

    A. What is the radius of the table?

    B. What is the area of the table? Round to the tenths place.

3. The Carousel on the National Mall has 4 rings of horses. Kiran is riding on the inner ring, which has a radius of 9 feet. Mai is riding on the outer ring, which is 8 feet farther out from the center than the inner ring is. Round to the tenths place. (from Unit 3, Lesson 4)

   A. In one rotation of the carousel, how far does Kiran travel?

   B. In one rotation of the carousel, how far does Mai travel?

   C. How much farther does Mai travel than Kiran?

   D. One rotation of the carousel takes 12 seconds. How much faster does Mai travel than Kiran?