



Homework: Area of Circles

Formulas

$$\text{Circumference} = 2 \pi r$$

or

$$\text{Circumference} = \pi d$$

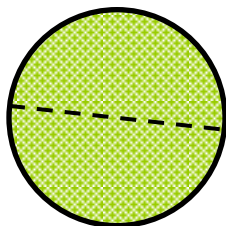
$$\text{Area} = \pi (r)^2$$

Name: _____

Use the formulas about the circumference and the area of a circle that you learned in the previous lessons to solve these problems.

1.

Every Sunday, Rachana goes walking around a circular park near her house. She walks all the way around the park, which is 9.42 miles. Today, she decided to take a shortcut that passes through the center of the park, as shown by the dotted line. What distance did she walk? Explain how you calculate the answer.



2.

The local government decided to replace the current grass in the park where Rachana runs. In order to buy the grass, they need to know the total area of the park. Use the information in the previous question to calculate the area of this round park. Explain how you calculated the answer.