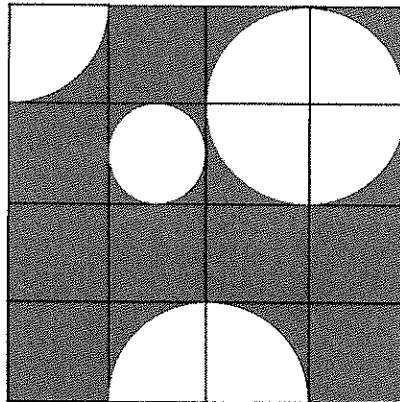


Find the area of a circle by evaluating formulas.

Name: _____

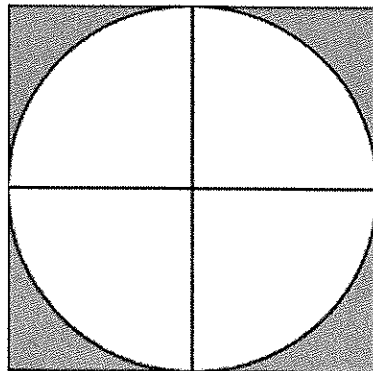
Date: _____

1. The students in Mr. Lewis' class are creating a mural to paint on one of the walls. The mural is going to be 8 ft. long by 8 ft. wide. They have a drawing of the mural below:



- a. The purple paint costs \$3 per square foot and the white paint costs \$2 per square foot. They currently have \$100. How much more money do they need in order to buy enough purple and white paint?

2. The outer shape is a square and the inner shape is a circle. The circle has a radius of 6 ft. Calculate the area of the shaded region.



Solve each of the following problems. Make sure you show all equations/formulas and how you evaluated and found your answers. Round your final answer to the nearest tenth if necessary.

3. The distance around the wheel of a truck is 9.42 feet. What is the diameter of the wheel?

4. A dog is tied to a wooden stake in a backyard. His leash is 3 meters long and he runs around in circles pulling the leash as far as it can go. How much area does the dog have to run around in?

5. The distance around a carousel is 21.98 yards. What is the radius?

6. A semi-circle shaped rug has a diameter of 2 feet. What is the area of the rug?

7. A spinner has 6 sectors, half of which are red and half of which are black. If the radius of the spinner is 3 inches, what is the area of the red sectors?