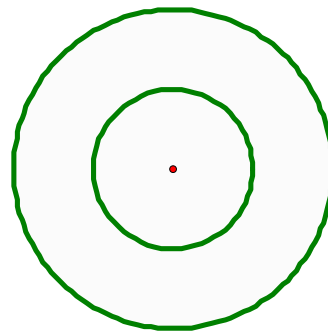


Pre 8.3b Circle Area and Circumference Problem Solving

This courtyard was designed for an apartment complex. The outer area will be covered with grass and is 10 yards wide. The inner circle is concrete and has a diameter of 10 yards.



1) The landscaper must order sod for the grassy area. How much should he order? Show all your steps and thinking below.

2) The landscape architect has planned for a border to be placed around both circles.

What are the lengths (circumference) of the borders?

Inner _____ Outer _____

3) Four large chocolate chip cookies fit perfectly into a gift box.

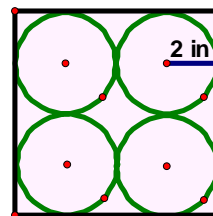
Find the length of the side of the box. _____

Find the area of the box. _____

Find the area of each cookie. Express your answer in terms of π .

What is the area of the box not covered by the cookies?

Extra credit: What is the area in the middle?



Pre 8.3b Assessment:

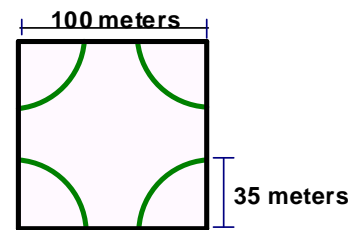
1) Your friend has asked you how to find the maximum area of a rectangle with the perimeter of 50.

- Write the directions for finding this. Draw a picture if you wish.

- Find the solution.

2) Mr. Baker bought the square piece of land shown. Unfortunately, he discovered the four shaded regions (four quarter circles) were swamps and not much good for anything.

- Which does he have more of, swamp or good land.
Show all work.



- 3) Create some problems about the target shown. (Begin by labeling the circles a, b, c, d. Label the inner circle a, etc.)

Your problems could involve circumference, area, percentage, probability.

Solve your problems.

