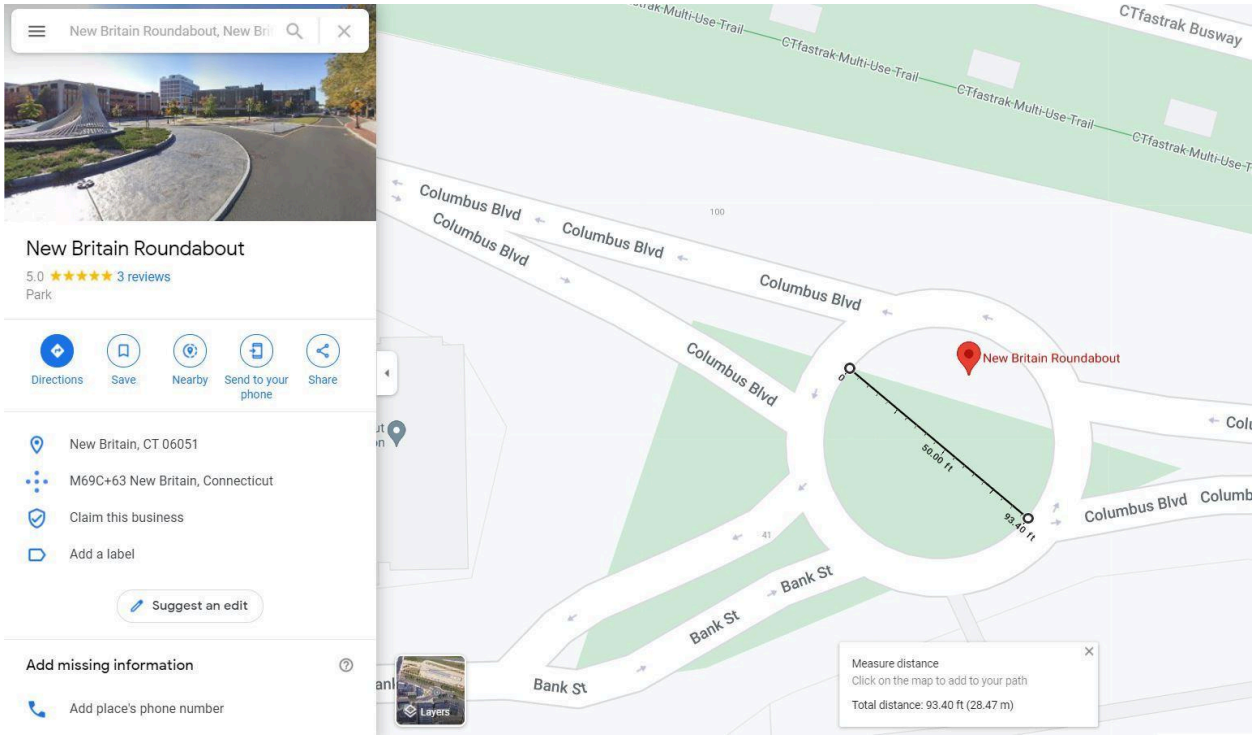
Name: _____ Date: _____ Class: _____

Mural Mathematics- Part II

Example A: Select a circular region in your community and identify circle terminology.

Figure 1: Diameter



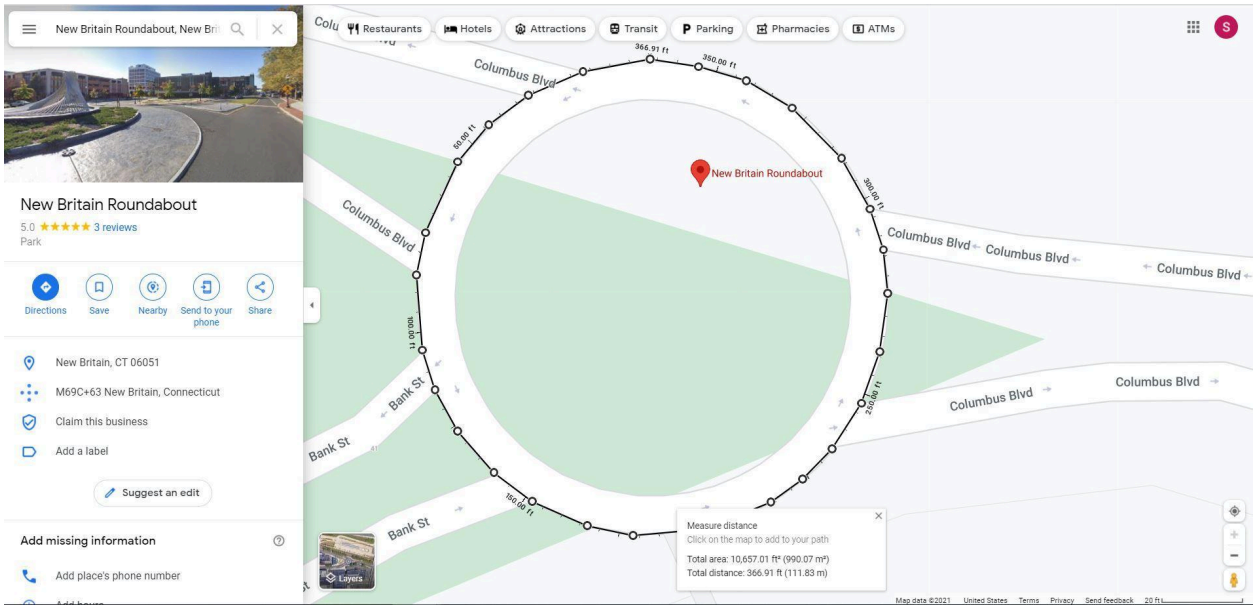
Task 1: Circle Terminology

- Select a circular region in your community for your mural and get the map.
- Identify the circle terminology below and mark up the map.
    - Diameter, radius, circumference, chords, arc, inscribed circles

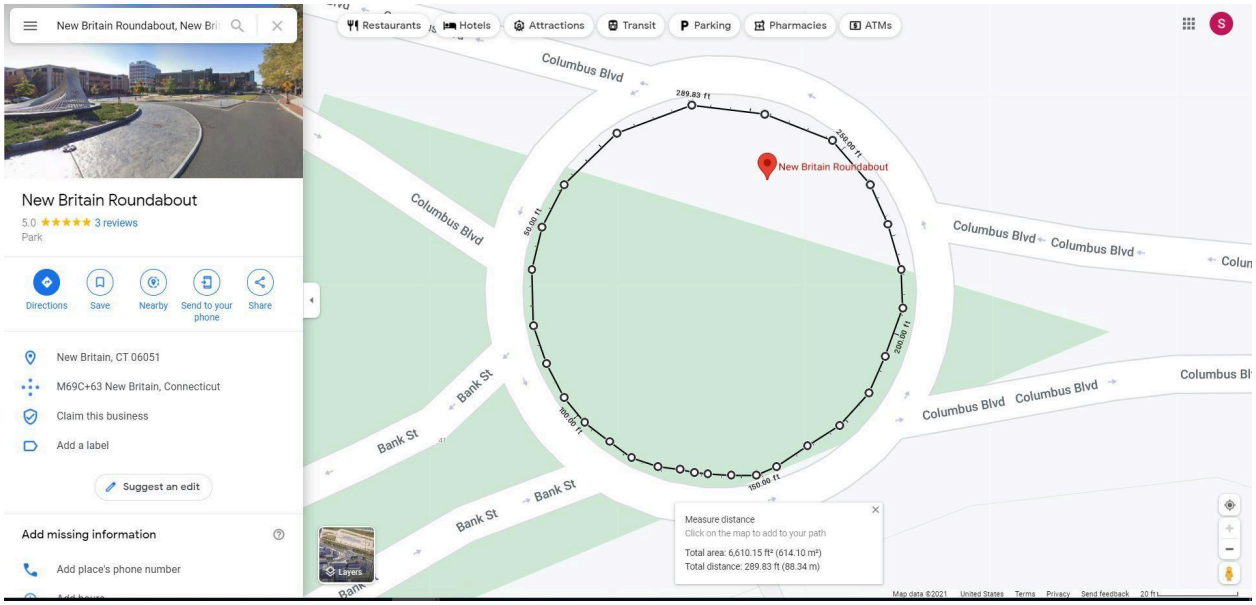
Example 2:

Taking the New Britain Roundabout as an example.

Find the area of the larger exterior circle.



Find the area of the smaller interior circle.



Find the area of the circular region to be painted. Take the area of the larger exterior circle and subtract the area of the smaller interior circle.

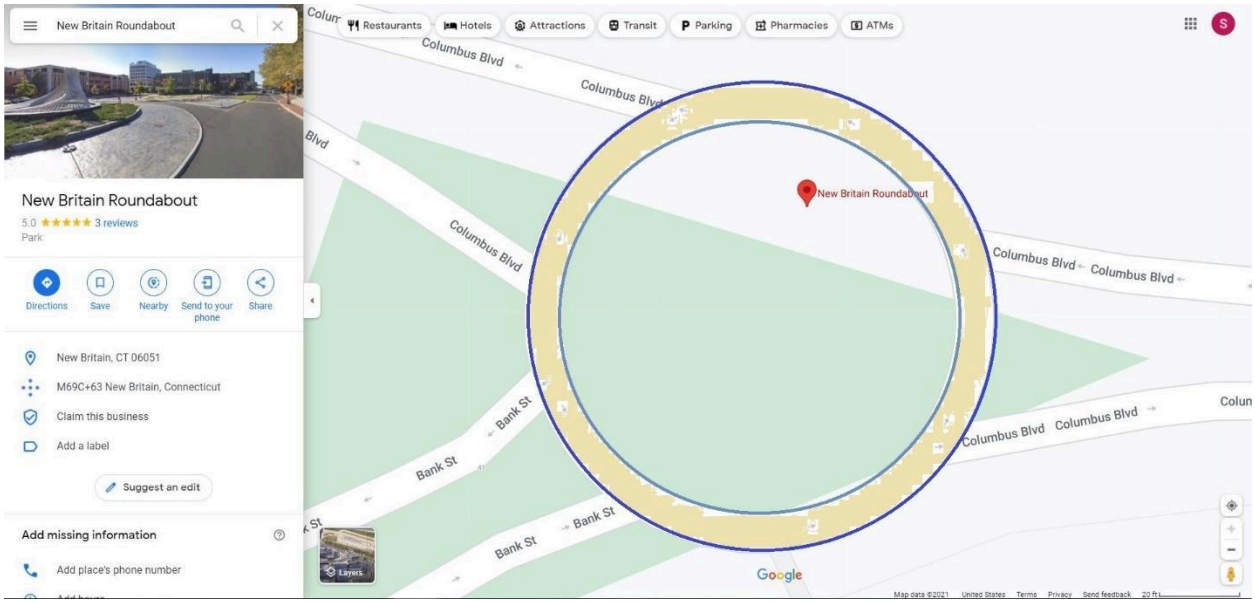
Discussion Questions: How can we improve accuracy? Do the closeness of the connecting dots affect accuracy? Limitations with online measurement tools. How would you measure in the real-world location?

Proportional size and areas: Explore Geometry: Area and Perimeter

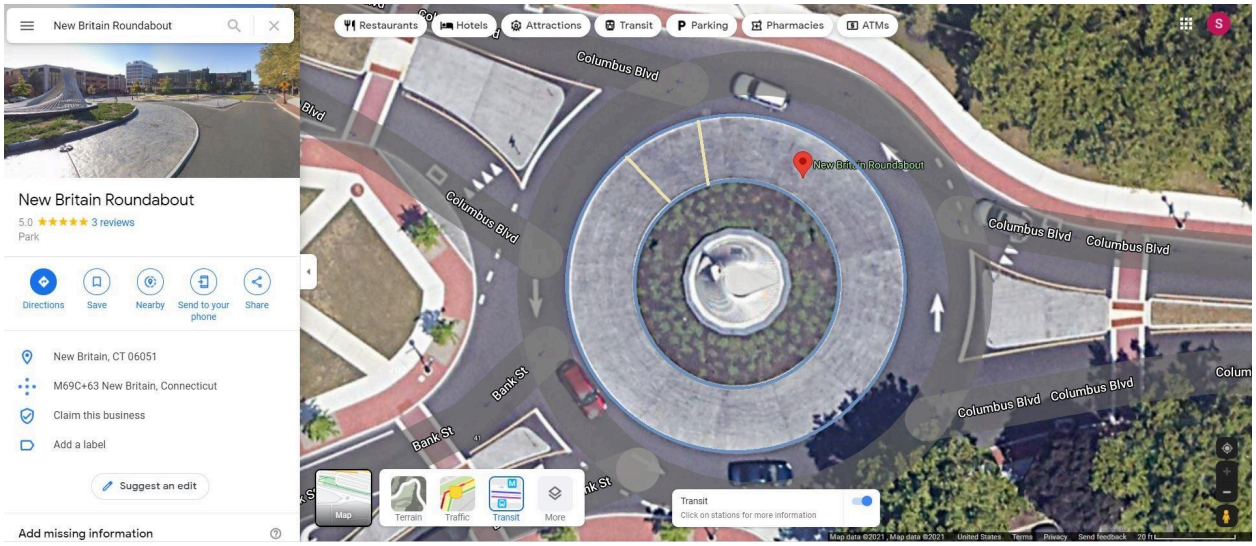
Task 2: Area and Proportional Areas

- Find the area of the larger exterior circle and the area of the smaller interior circle. Then calculate the area of the circular region to be painted.
- Select an arc for one part of your mural design and calculate the arc length.
- Determine the proportional areas for your mural diagram and the real-world location.

Example 3: Mural Design and Costs



Suppose your phrase for the mural is “mural math”. Think about the number of letters and spaces in between 9 letters and 2 spaces= 11 sections, to divide the area into 11 sections. What is the area of each section?



Task 3:

- Sketch on your scaled diagram the design of your mural.
- Determine the amount of paint you will need to cover your mural's background with a primer color.
- Estimate the amount of paint you will need for the mural and the cost.
  [How Much Paint Do I Need? - Paint - How To Videos and Tips at The Home Depot]