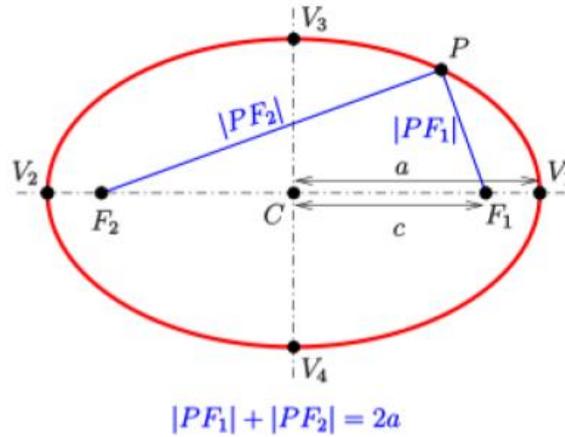


Overlapping Ellipses

An ellipse is a curve in a plane surrounding two focal points such that the sum of the distances to the two focal points is constant for every point on the curve. – Wikipedia.



In this assignment you will use a Monte Carlo Simulation to estimate the overlap between two Ellipses.

Part 1: Ellipse Class (25 Points)

- A. Write a class to capture the necessary information of an ellipse.
- B. Write code to thoroughly test your implementation of the ellipse class including:
 - a. A constructor that accepts no variables.
 - b. A constructor that accepts all appropriate variables.
 - c. Setting and getting the appropriate variables.
 - d. A function that returns the area of the ellipse
 - e. A function that returns the circumference of the ellipse.