

Define the Circle2D class that contains:

- Two double data fields named x and y that specify the center of the circle with

get methods.

- A data field $radius$ with a get method.

- A no-arg constructor that creates a default circle with $(0, 0)$ for (x, y) and 1 for

radius.

- A constructor that creates a circle with the specified x , y , and radius.

- A method `getArea()` that returns the area of the circle.

- A method `getPerimeter()` that returns the perimeter of the circle.

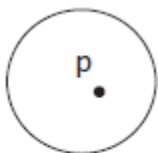
- A method `contains(double x, double y)` that returns true if the specified

point (x, y) is inside this circle

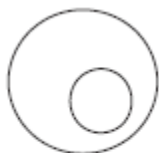
- A method `contains(Circle2D circle)` that returns true if the specified circle is inside this circle

- A method `overlaps(Circle2D circle)` that returns true if the specified circle overlaps with this circle

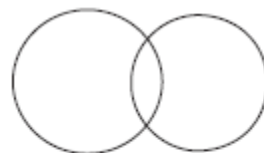
- A method `findbiggestcircle(Circle2D[])` that returns biggest circle



(a)



(b)



(c)