

MyRectangle2D

-x : double

-y : double

-length : double

-width : double

MyRectangle2D()

MyRectangle2D(x : double, y : double,
length : double, width : double)

+ getX() : double

+ setX(newX : double) : void

+ getY() : double

+ setY(newY : double) : void

+ getLength() : double

+ setLength(newLength : double) : void

+ getWidth() : double

+ setWidth(newWidth : double) : void

+ getArea() : double

+ getPerimeter : double

+ contains(x : double, y : double) :
boolean

+ contains(r : MyRectangle2D) : boolean

+ overlaps(r : MyRectangle2D) : boolean

X coordinate of the center of MyRectangle2D

Y coordinate of the center of MyRectangle2D

Length of MyRectangle2D (parallel to x-axis)

Width of MyRectangle2D (parallel to y-axis)

No-arg constructor default x=0, y=0, length/width = 1

Create a MyRectangle2D with specified x, y, length, and width

Return the value of x coordinate

Set new x coordinate value

Return the value of y coordinate

Set new Y coordinate value

Return the length of MyRectangle2D

Set new value for length

Return value of width

Set new value or width

Compute area of MyRectangle2D, area = length * width

Compute perimeter of MyRectangle2D. Perimeter + 2(length + width)

Method returns true if point (x, y) is within MyRectangle2D

Method returns true if MyRectangle2D r is within rectangle

Method returns true if MyRectangle r overlaps rectangle