Point Class Warm-up

1) Write a *class*, `Point`, to represent a 2-dimensional point with coordinates x and y (both doubles). Your class should contain the following instance variables and methods, override `toString()` and `equals()`, and implement the `Comparable` interface.

`private double x`	the x coordinate
`private double y`	the y coordinate
`public Point ()`	constructs the point (0, 0)
`public Point (double x, double y)`	constructs a point with the given coordinates
`public void setX(double x)`	sets the x coordinate to the given value
`public void setY(double y)`	sets the y coordinate to the given value
`public double getX()`	returns the x coordinate
`public double getY()`	returns the y coordinate
`public double distance(Point p)`	returns the distance from another point

Two points are equal if they have the same x coordinates and the same y coordinates. When implementing `Comparable`, points should be compared relative to their distance from the origin (0,0), with points closer to the origin considered "less" than points farther from it. The distance between two points is defined as the square root of the sum of the squares of the differences between the x and y coordinates.

2) Consider the `Point` class you wrote in question #1. Write a *static* method in the `Point` class to swap the coordinates of two points. For example, if p1 is (2 , 3) and p2 is (4.5 , 9.3), after a call to `swap`, p1 would be (4.5 , 9.3) and p2 would be (2 , 3).

3) Consider the `Point` class you wrote in question #1. Write another constructor below that accepts another `Point` as a parameter and initializes the new `Point` to have the same (x,y) values.