

## Point

double x

double y

(x, y)

Point() // (0,0)

Point(double a, double b)

getX() double

getY() double

changeX(double delX) // add given value to x.

changeY(double delY) // add given value to y.

distanceTo(Point P) double

equals(Point P) boolean // A(x<sub>1</sub>, y<sub>1</sub>), B(x<sub>2</sub>, y<sub>2</sub>)

// True if  $|x_2 - x_1| < 0.01$  &  $|y_2 - y_1| < 0.01$

toString() String

## Using Point

ab = A.distanceTo(B)

Create 5 random points where  
x and y coordinates of each point  
is a random integer between  
[5, 20] inclusive. ✓

1. Name points: A, B, C, D, & E ✓

2. Display all points. ✓

3. Display distance between all point with labels. ✓

AB = , AC = , AD = , AE = , BC = ... ✓

4. Use the distanceTo method of point  
class to find two points that are  
closest to each other. Display these  
points.

5. Display the points that are farthest  
from each other.

( "Distance between AB is : " + A.distanceTo(B) ) ✓