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To map our definition of Point in Pyret to Java, I first had to make an abstract class Point. I then created two classes, PolarPoint and CartesianPoint, which extend Point, and gave them all the methods needed to get and set the values of the two variables.

To map our case statements to Java, I used a series of if statements to find out if both points were Cartesian, polar, or one of each. If there are any polar points, I call a method named convert() that creates a new Cartesian point from the polar point. After both points are Cartesian, the method calcDistance() is called, which takes in the two Cartesian points and calculates the distance between them. The value calculated is returned.