Math Grades 9 - 12
Coordinate plane, tangents, and curves

MA.7.G.5.3
MA.912.C.3.2

A Short Account of the History of Mathematics
"Rene Descartes"
W. W. Rouse Ball

Reading Level: 12

Activity:

1. In the reading, it is stated that Descartes "saw that a point in a plane could be completely determined if its distances, say *x* and *y*, from two fixed lines drawn at right angles in the plane were given, with the convention familiar to us as to the interpretation of positive and negative values." Make a graph to demonstrate this fact. Label three points on the graph.

2. Descartes divided curves into two classes, geometrical and mechanical. Explain the two terms.

3. Explain the method used by Descartes to find the tangent at any point of a given curve.