Figure 2.8: Construction of the cissoid

Exercise 1. *I don't think the author of our textbook gives an adequate description of the cissoid. I think part of the description is only implied. How exactly are the points on this curve determined?*

Exercise 2 (2.5.1). *Using X and Y for the horizontal and vertical coordinates, show that the straight line RP in Figure 2.8 has equation*

$$Y = \frac{\sqrt{1 - x^2}}{1 + x}(X - 1).$$

Exercise 3 (2.5.2). *Deduce the equation of the cissoid from Exercise 2.5.1.*