7. (12 points) The figure shows the graph of the curve \(2x^3 + 2y^3 - 9xy = 0\), called a *folium of Descartes* because it was studied by Descartes in about 1638.

(a) Using the equation above, show that the point \((2, 1)\) lies on the curve.

(b) Compute the derivative \(\frac{dy}{dx}\) of the function of \(x\) defined implicitly by the equation.

(c) What is the slope of the tangent line to the curve at the point \((2, 1)\)?

(d) Write the equation of the tangent line to the curve at the point \((2, 1)\). Draw the graph of this line on the figure.