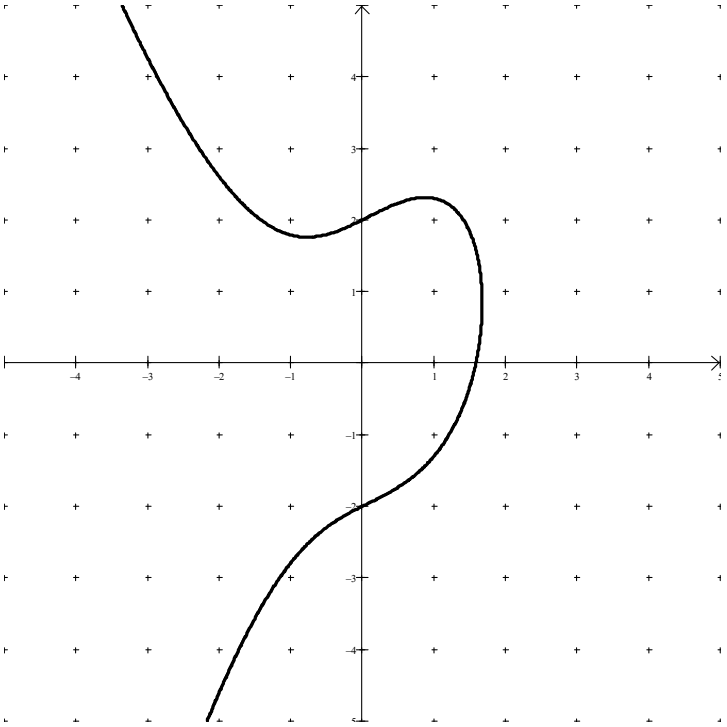
Magnet Analysis 1A Name_____

3/3/2009

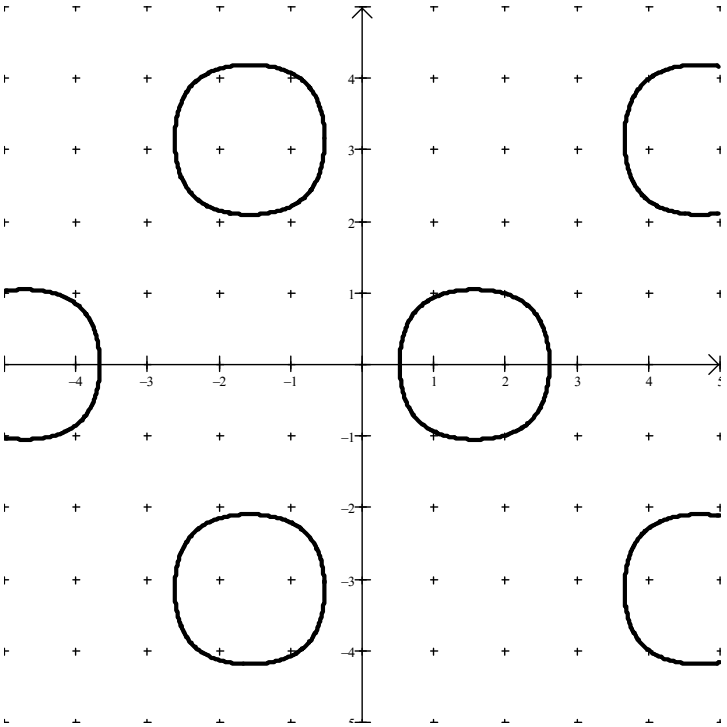
Implicit Differentiation

For each function *y*, defined implicitly in terms of *x*, find $\frac{dy}{dx}$:

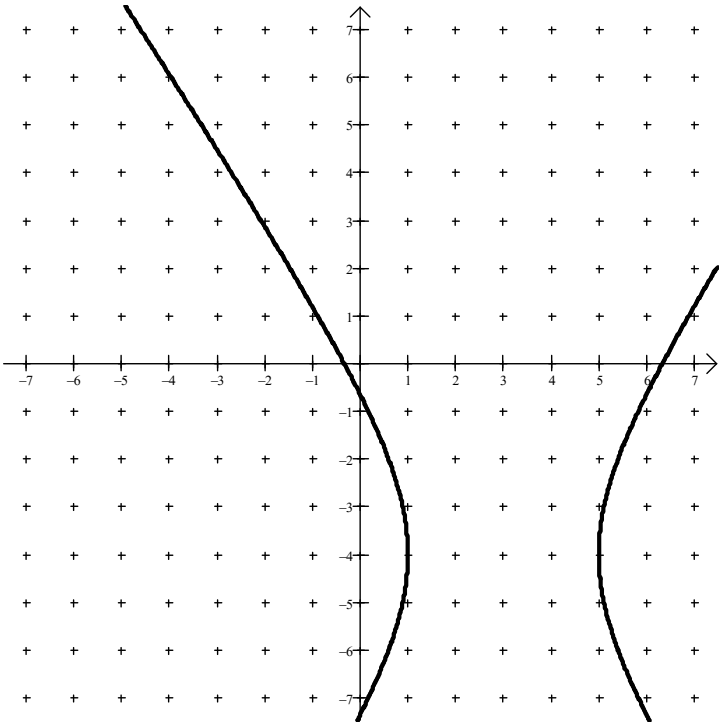
$x^3 - xy + y^2 = 4$



$2\sin x \cos y = 1$



$$\frac{(x-3)^2}{4} - \frac{(y+4)^2}{9} = 1$$



Folium of Descartes

$x^3 + y^3 - 6xy = 0$