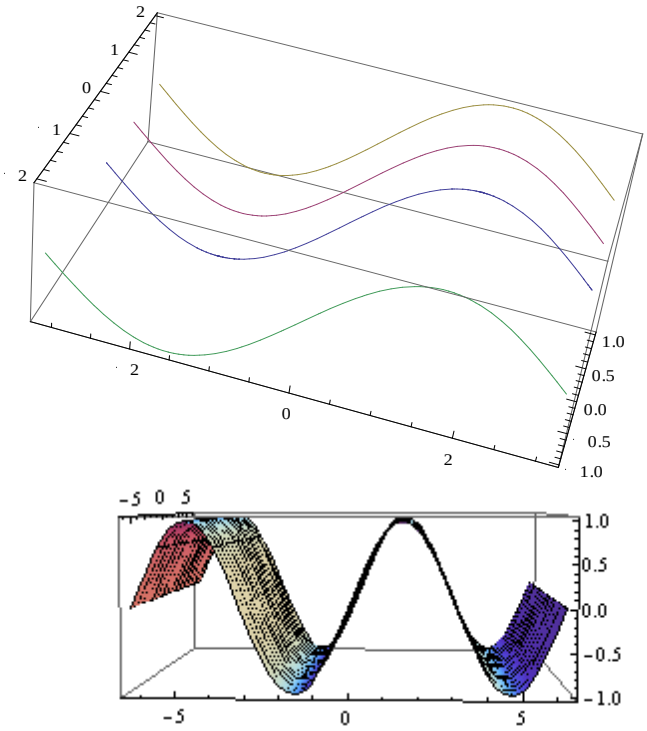
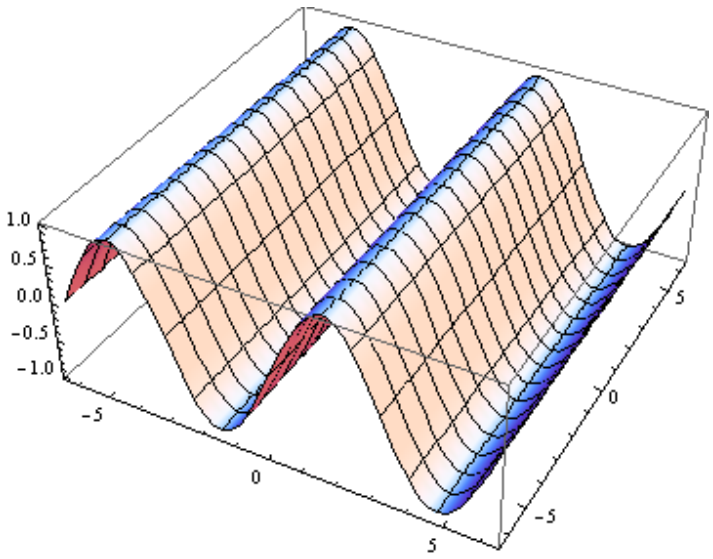
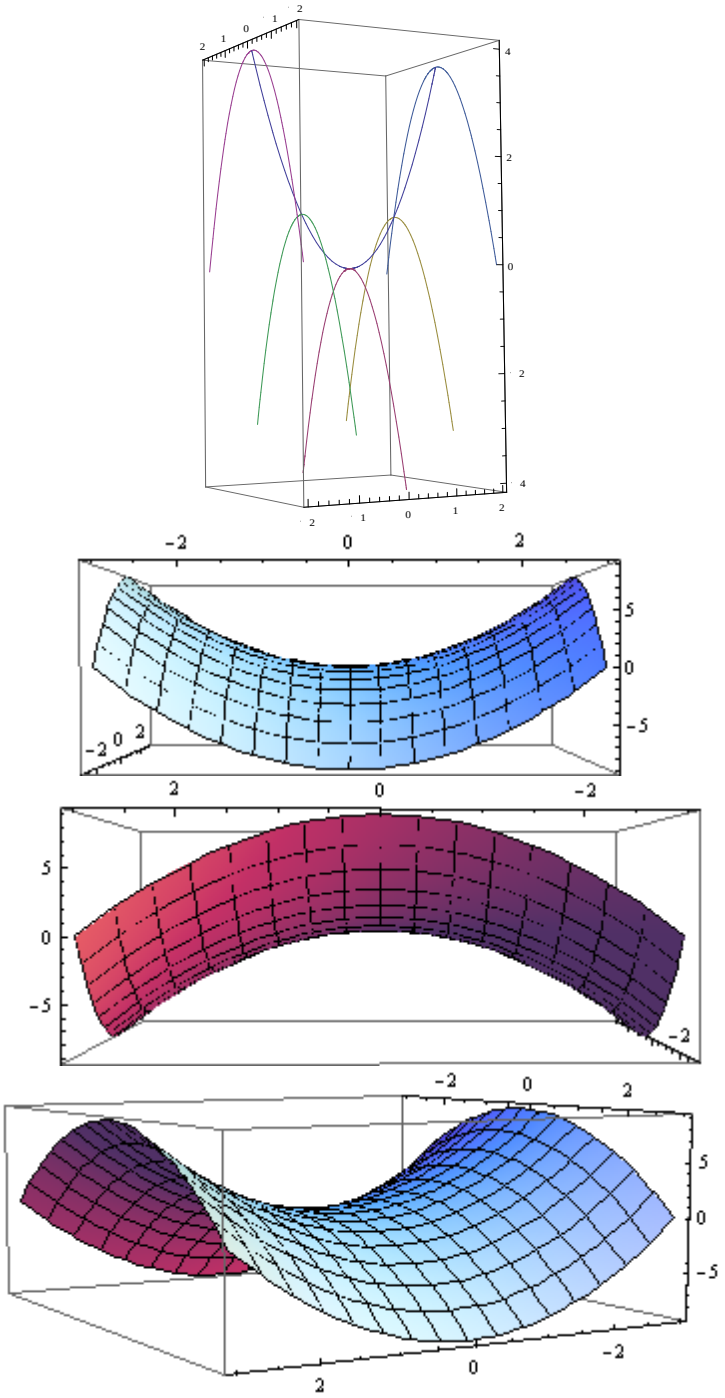
Graphs of Functions

Graph of $f(x, y) = Sin(x)$

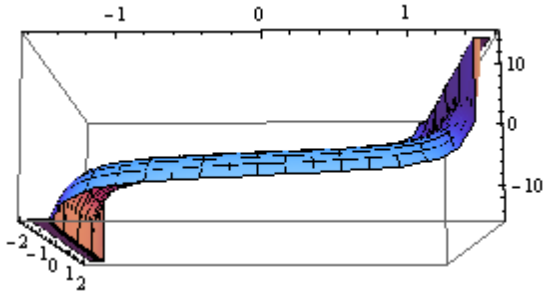


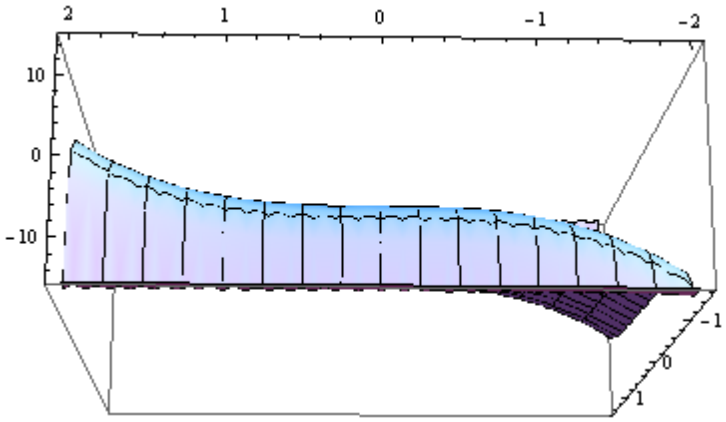


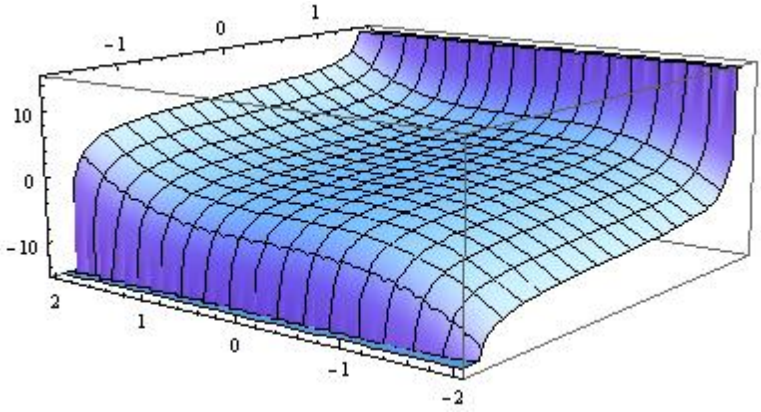
Graph of $f(x,y) = x^2 - y^2$



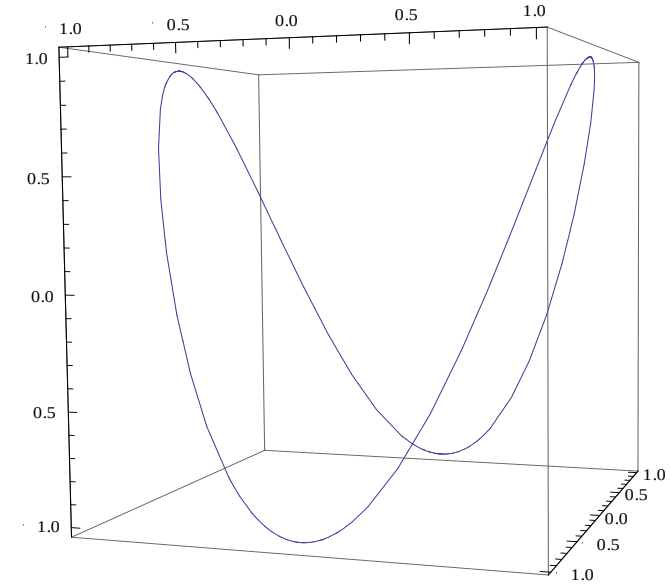
Graph of $f(x, y) = \tan x + y^3$

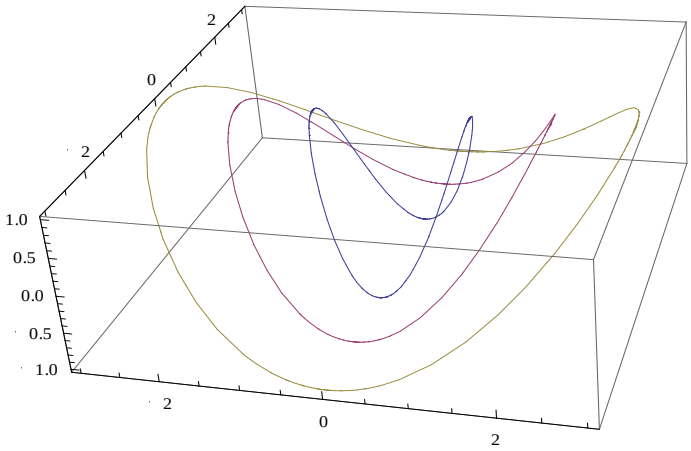


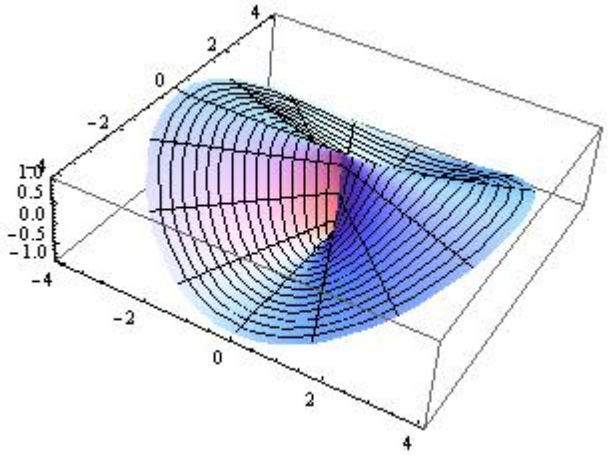




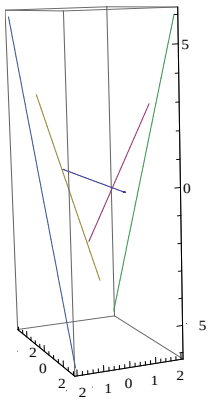
Graph of $f(x,y)=\dfrac{x^2-y^2}{x^2+y^2}$

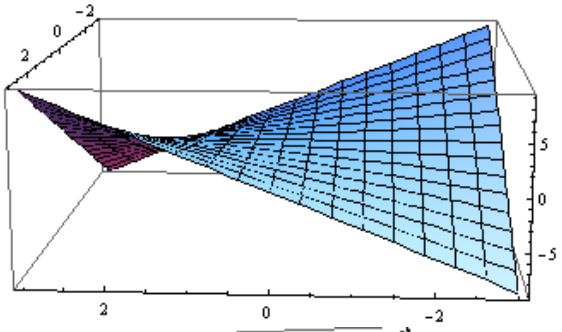


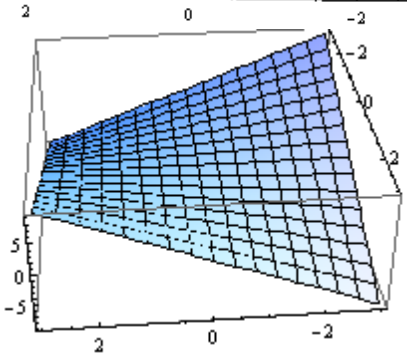




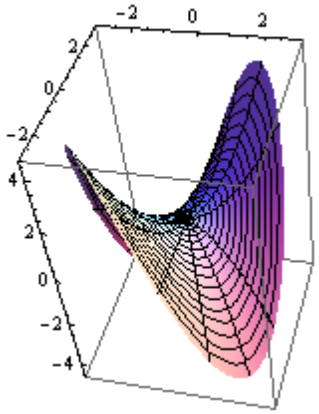
Graph of $f(x, y) = xy$

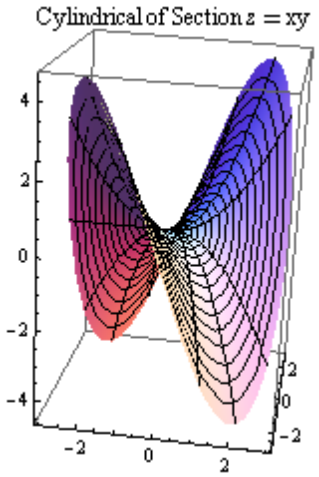




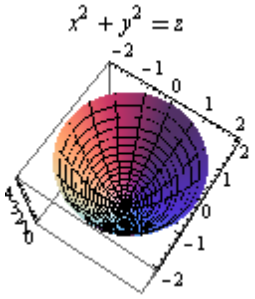


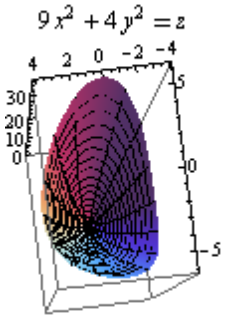
Cylindrical of Section $z = xy$





Graphs of $f(x,y) = x^2 + y^2$ and $f(x,y) = 9x^2 + 4y^2$





Graph of $f(x,y) = Sin(y - x^3)$

This graph is much easier to visualize with respect to a coordinate system, in which the x-axis is replaced by the curve $y = x^3$. With respect to this coordinate system f is a cylinder.