

Let $g(x, y) = \frac{-3y}{x^2 + y^2 + 1}$

1. Use Maple to do a 3-D plot of the surface.
2. Create a contour plot of the graph $z = g(x, y)$ that captures the vital information.
3. Create a density plot that captures the vital information.
4. Where does $g(x, y)$ have local maximum and local minimum values?