Let $f(x, y)=2 x+4 x^{2}-y^{2}+2 x y^{2}-x^{4}-y^{4}$

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