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

- 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?