

DPGRAPH Assignment #9 - Math 260 – Towers

The purpose of this exercise is to use DPGRAPH to plot a tangent plane to a surface of the form $F(x, y, z) = c$.

1. Use DPGRAPH to plot the sphere $x^2/9 + y^2/9 + z^2/9 = 1$.
2. Find the equation of the tangent plane to this surface at the point $(x, y, z) = (3/\sqrt{3}, 3/\sqrt{3}, 3/\sqrt{3})$.
3. Use DPGRAPH to plot the tangent plane that you found in Step 2. Your plot should show both the sphere and the tangent plane. This plot is what you are going to turn in. Print at least two views. It is easier to see what is going on if you make your plots partially transparent.