

Class Worksheet 1/27/22

Example 1: Sketch by hand the graph of $z = h(x, y) = x^2 + y^2 - 3$. Sketch and describe the intersection of the graph with the xy -plane.

Example 2: The graph of $z = f(x, y)$ is the lower hemisphere of the sphere centered at the origin with radius 4. Find a formula for $f(x, y)$. What is the domain of f ?

Example 3: Find an equation of the cylinder about the y -axis with radius 3.

Example 4: Which of the following surfaces is the graph of the function $z = \cos(xy)$?

