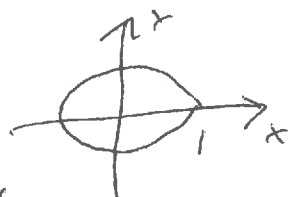
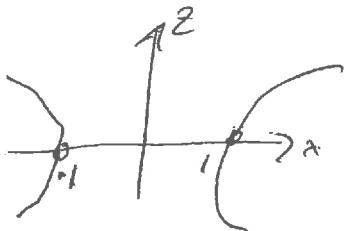


③ $x^2 + y^2 - z^2 = 1$

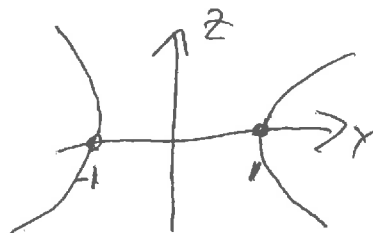
When $z=0$ the graph is a circle



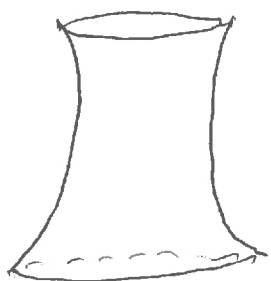
When $y=0$ the graph is a hyperbola



When $x=0$ the graph is a hyperbola



The graph is a hyperboloid of one sheet



The part above the xy plane looks something like a cooling tower of a nuclear power plant.

