

Please PRINT your name _____

No calculators, cell phones, computers, notes, etc.

Circle your answer. Make your work correct, complete and coherent.

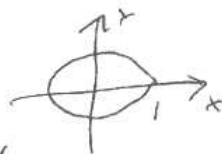
The quiz is worth 5 points. The solutions will be posted on my website later today.

Quiz 9, Wednesday, October 7, 2020

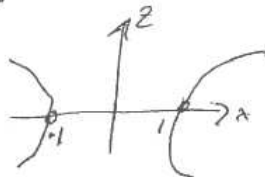
Describe, graph, and name the graph of $x^2 + y^2 - z^2 = 1$ in 3-space.

③ $x^2 + y^2 - z^2 = 1$

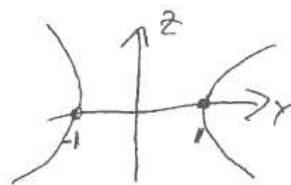
when $z=0$ the graph is a circle



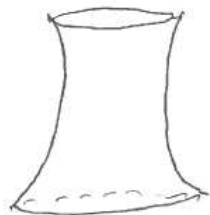
when $y=0$ the graph is a hyperbola



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.