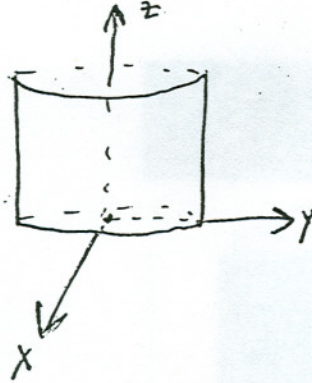


PRINT Your Name: _____

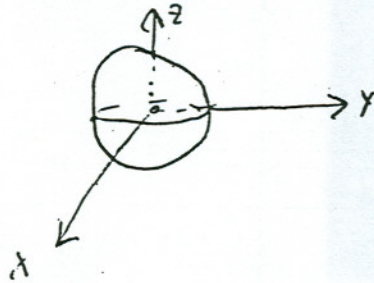
There are 10 problems on 4 pages. Each problem is worth 10 points. SHOW your work. **CIRCLE** your answer. NO CALCULATORS! Check your answer whenever possible!

1. Graph $x^2 + y^2 = 1$ in 3-space.



a cylinder

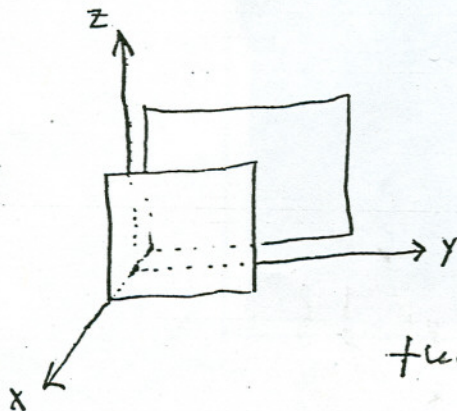
2. Graph $x^2 + y^2 + z^2 = 1$ in 3-space.



a sphere

3. Graph $x^2 = 1$ in 3-space.

$x=1$ or $x=-1$



two planes

~~the planes~~

~~the planes~~