Presentations08

Look up the Königsberg bridges problem and explain its solution.	1
Look up some problems in Graph Theory or Topology in your textbook and solve them.	2
Suppose there are three houses on a sphere and each needs to be connected to the water, gas, and electricity companies. Determine if there is a way to make all the connections without digging or going over another utility's line. What if instead of a sphere the three houses were on a world in the shape of a donut.	3
In the previous problem. What if each house wanted to connect to the internet cable company? Can you do it on a donut? Can you do it on a double holed donut?	4
What is a 2-dimensional manifold? What is an n-dimensional manifold? Give some examples.	5
What is an orientable manifold? Look up and classify the following as orientable or not: sphere, anulus, Möbius strip, Klein bottle, projective plane, torus.	6