Problem Set 4 **Set Theory & Topology** **Due 2/28/18**

You are expected to do the following problems to a high standard (i.e., at least well enough to be published in a textbook) for full credit. Four of these problems will be selected (by Jon) for grading, with each worth 5 points.

1. Give an example of a set which is finite and bounded, or explain why it isn't possible.
2. Give an example of a set which is finite and unbounded, or explain why it isn't possible.
3. Give an example of a set which is infinite and bounded, or explain why it isn't possible.
4. Give an example of a set which is infinite and unbounded, or explain why it isn't possible.