Sec. 14.1 Functions of Several Variables

Please read through Sec. 14.1, Functions of Several Variables, in our textbook.

1. The definition, computation, domain, range, and graphing should all be familiar from functions of a single variable.

2. Pay careful attention to level curves (often called contours).

3. Please navigate to the following web pages, read the material, and play with the graphics.
   - [http://mathinsight.org/level_sets](http://mathinsight.org/level_sets)
   - [http://mathinsight.org/level_set_examples](http://mathinsight.org/level_set_examples)
   - [http://tutorial.math.lamar.edu/Classes/CalcIII/MultiVrbleFcns.aspx](http://tutorial.math.lamar.edu/Classes/CalcIII/MultiVrbleFcns.aspx)

4. After you complete the reading, do the assignment from Sec. 14.1.

Sec. 14.2 Limits and Continuity

Please read through Sec. 14.2, Limits and Continuity, in our textbook.

1. Pay particular attention to showing how a limit does not exist.

2. Please navigate to the following web pages, watch the video, read the material, and study the examples.
   - [http://www.youtube.com/watch?v=dGSPcQNy78E](http://www.youtube.com/watch?v=dGSPcQNy78E)
   - [http://tutorial.math.lamar.edu/Classes/CalcIII/Limits.aspx](http://tutorial.math.lamar.edu/Classes/CalcIII/Limits.aspx)

3. After you complete the reading, do the assignment from Sec. 14.2.