

Functions of Multiple Variables

Reading

Sections 15.2

Problems

- Practice Problems 15.2: 3, 9, 11, 13, 16, 27
- Problems to turn in 15.2: 12, 14, 22, 24

Topics to know

1. Punctured disc around a point
2. Limit for functions of two variables
3. Simple examples (Example 1): $f(x, y) = x$, $f(x, y) = y$
4. Limit laws (theorem 1)
5. Continuous functions
6. Showing a limit doesn't exist by approaching from different directions
7. Handling a limit by changing to polar coordinates