## Math 2D – Suggested Homework 6

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Thursday, May 10, 2018

**Reading:** Sections 14.5 and 14.6. Make sure you are comfortable with the chain rule, especially if you do want to do more math later on, to the point that you don't need the tree diagrams any more! (they are cute, but just an aid to do it the first couple of times). Skip Example 2, and honestly, Equations 6 and 7 in the Implicit Differentiation section are kind of useless, don't memorize them because it's much easier to do the problems directly! Section 14.6 is important as well, especially for later on, so make sure to understand everything in this section (except for the proofs). Remember that to calculate directional derivatives, you need to have a **unit** vector!

- Section 14.5: 1, 6, 7, 11, 13, 15, 18, 23, 29, 31, 34, 45, 51
- Section 14.6: 7, 11, 13, 15, 21, 23, 28, 33, 38, 41, 44, 49, 51, 54, 61