## Part I: Reading (due at the beginning of class Wednesday, April 24)

Finish page one and try page two (numbered pages here, so we're just talking about the first sheet of the handout) of the goldenrod Taylor Series handout. You don't need to turn anything in, but we'll discuss it at the beginning of class Wednesday, so bring your questions!

## Part II

No Part II this time.

## Part III: Homework Problems (due FRIday, April 26 at the beginning of class)

We keep forgetting to talk about when Part IIIs are due this week. Let's make them all due Friday.

- 1. Let  $f(x) = \sqrt{1+x}$ .
  - (a) Find  $P_5(x)$  centered at 0.
  - (b) Using Desmos, graph the f(x) and the first several Maclaurin polynomials for f(x). Based on your graphs, what do you think the interval of convergence is for the Maclaurin series for f(x)?
  - (c) Now compute the interval of convergence for this Maclaurin series. Don't forget to test the endpoints!