Homework Set 9

DUE: APRIL 15, 2019 (AT THE BEGINNING OF CLASS)

To be handed in

Please write your solutions to Problem 1 on a single sheet of paper!

1. Determine for which values of x the functions below are increasing / decreasing. List all critical points, and classify them into local minima / local maxima / neither.

   a) $f(x) = (x^2 - 1)^2 + 1$

   b) $f(x) = x^2 e^x$

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3. Textbook (5th edition) Section 4.1, Exercises $7 - 10$, $11 - 14$, $21 - 25$, 71, 72

4. Textbook (5th edition) Section 4.2, Exercises 67, 68

5. Textbook (5th edition) Section 4.3, Exercises $3 - 12$, $19 - 20$, $75 - 78$