

**Homework Set 6**

DUE: MARCH 11, 2019 (AT THE BEGINNING OF CLASS)

**To be handed in***Please write your solutions to Problem 1 on a single sheet of paper!*

1. Compute the first derivative of the following functions:

a)  $f(x) = \frac{\ln(x)}{x^2 + 1}$

b)  $A(x) = x^3 e^x \cos(x)$

c)  $h(x) = \sqrt{2x^3 + 3x^2}$

3. Textbook (5th edition) Section 3.3, Exercises 1-6, 39-44, 85, 86, 92

4. Textbook (5th edition) Section 3.4, Exercises 1-6, 11-16, 35-37