MAT175, Fall 2018   **Renato Ghini Bettiol**

Homework Set 5

DUE: OCT 15, 2018 (AT THE BEGINNING OF CLASS)

To be handed in

Please write your solutions to Problems 1 a)-e) on only 1 sheet of paper.

1. Compute the first derivative of the following functions:

   a) $f(x) = e^{4-3x} \sin(7x^2)$

   b) $h(t) = \sqrt{7t^2 - 1}$

   c) $f(x) = \dfrac{x + \cos(2x)}{(x+1)^3 + 1}$

   d) $a(s) = \tan(s^3) + \tan^3 s$

   e) $z(r) = \dfrac{(2r+1)^{3/2}}{r^4 + 1} \cos(5r^2 - e^{2r+3})$

---

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, 51, 55, 63-68, 98