

**Calculus 2302A - Intermediate Calculus I**  
**Fall 2013**  
**Homework 10**

**Due date:** Wednesday November 27, in class.

**Guidelines.**

- Group work is allowed and in fact encouraged.
- However, you may **not** look at other students' solutions. You must write **your own** solutions. Strikingly similar solutions will be flagged as suspicious.
- Please write the names of people with whom you have discussed the homework. Some similarity will then be accepted.
- Please show your work. **No credit** for answers without justification.

**Problem 1.** Show the sum rule for differentiability: If two functions  $f$  and  $g$  are differentiable at  $(x_0, y_0)$ , then their sum  $f + g$  is differentiable at  $(x_0, y_0)$ .

**Other problems.** Taken from the textbook.

§14.5 # 2, 8, 16, 32.

Total: five problems.