

This assignment is in two parts. The first part is due at the start of class on Day 16. It will not be collected, but you are expected to complete these exercises, just to practice basic skills. If you feel that you need more practice, then do more problems or talk to me.

15.2 Exercises 3, 12, 17, 24, 28, 31, 59

15.3 Exercises 5, 13, 23, 31

The second part is due on paper at the start of class on Day 16. Submit polished solutions, including all necessary work and no unnecessary work, in the order assigned.

A. 15.2 Exercise 64.

B. 15.3 Exercise 16.

C. Let  $R = [0, 1] \times [0, 1]$ . Use Mathematica to compute

$$\iint_R \frac{x-y}{(x+y)^3} dA$$

in both orders:  $dx dy$  and  $dy dx$ . What happens? What does it have to do with Fubini's theorem?