

MATH 205: Homework 5

Due Fri Nov 3

Problems are from Boller and Sally. I recommend at least thinking about all the exercises, even if they are not assigned, as you read through the textbook. I also recommend trying to prove all the Theorems which are left unproven in the book.

Problem 1. From Section 6.2: 31, 32 (problem is stated wrong should be $\frac{\partial P}{\partial y} = \frac{\partial Q}{\partial x}$), 33

Problem 2. From Section 6.3: 5, 6

Problem 3. From Section 6.4: 11

Problem 4. From Section 6.5: 2,4,7,11,19 (typo in question should be “show that every [differential 2-form]”)