

## Math 330 Section 5 - Fall 2023 - Homework 09

*Published: Tuesday, October 3, 2023*

*Running total: 31 points*

*Last submission:*

*N/A: No written assignments!*

### Status - Reading Assignments:

Here is the status of the reading assignments you were asked to complete before the first one of this HW.

MF lecture notes:

ch.2.1 – 2.7, ch.3, skim ch.4 (optional), ch.5 - 7.2

B/G (Beck/Geoghegan) Textbook (optional, EXCEPT for ch.3 on logic):

ch.1 – 3, ch.5 – 7

B/K lecture notes:

ch.1.1 (Introduction to sets) (optional)

ch.1.2 (Introduction to Functions) but skip ch.1.2.4: Floor and Ceiling Functions (optional)

### New reading assignments:

#### Reading assignment 1 - due Monday, October 9:

- Carefully read the remainder of MF ch.7 (12 pages only)

#### Reading assignment 2 - due: Wednesday, October 11:

- a. Carefully read MF ch.8.1. **You have been warned:** I love to ask the students in the major exams to prove (parts of) De Morgan!
- b. Those of you with an academic bend are encouraged to study the optional Chapter 8.2:  $(2^\Omega, \Delta, \cap)$  as a CRU (Remark 8.1)(5)) (but not an integral domain: If  $A, B$  are disjoint and nonempty, then  $A \cap B = \emptyset$ ).
- c. Carefully read MF ch.8.3. Be sure to understand formula (8.7):  
 $Y^X = \{f : f \text{ is a function with domain } X \text{ and codomain } Y\}$ .
- d. Carefully read MF ch.8.4 through Proposition 8.10. Skim or skip the remainder.

#### Reading assignment 3 - due Friday, October 13:

- Carefully read MF ch.9.1.

**Written assignments: NONE FOR THIS HOMEWORK**