## What to Study for the Final Exam MTH 3318 Fall 2023

In preparation for the Final Exam, go to my website:

www.pat-rossi.com Academic Links MTH 3318

and work through the following:

- 1. Test #1 Fall 2023
- 2. Test #2 Fall 2023
- 3. Test #3 Fall 2023

Know how to do:

- 4. The exercises in *Group 5 Functions #1*
- 5. The proof that the set of even integers E is countably infinite
- 6. The proof that 5**Z**, the set of integers that are multiples of 5, is countably infinite

(The proofs of 5, 6 can be found on my website at *Group #5 - Functions 2*)

- 7. The proof that the set of integers **Z** is countably infinite
- 8. The proof that  $\mathbf{Q}^+$  is countably infinite
- 9. The proof that the set of real numbers in the interval [0, 1] is uncountable

(The proofs of 8, 9 can be found on my website at *Group #5 - Functions 2a*)

10. The exercises in Group 5 - Functions #1

If you want more practice doing a certain type of exercise, work through similar exercises in:

What to Study for Test #1 What to Study for Test #2

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What to Study for Test #3

on my website