

6. REVIEWING THE CLASS SO FAR

We have talked about various topics in class so far:

- (1) Sets
- (2) Elements
- (3) Functions
- (4) Bijections
- (5) Knowing two sets have the same “size” without counting.
- (6) Injections
- (7) Why the set of all natural numbers is in bijection with the set of all positive natural numbers.

(I) I would like you to choose three topics that you would like to understand better, and write out what you would like to understand better about them.

(II) Next, I want you to spend two hours learning about those topics using the course notes, the videos, whatever resources you want to use.

(III) Finally, I want you to write an explanation of the definition and use of the three topics you chose—as though you are teaching them to me. This explanation must also include how these three topics are related to other topics on the list above. You may construe “related” in any way you want.

*** If you use any sources beyond the course notes and lecture videos, you must cite those sources. And if there are any ideas that you are using in your writing that come from these outside sources, you must explicitly indicate that these ideas came from outside sources, referencing which sources they came from.

This, of course, is review for the exam on Monday. So you should push yourself to be as accurate and deep as possible.