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Examples of assignments

To get an idea of the nature and number of reading questions, and the number and level of exercises in Parts B and C.

*From a Discrete Mathematics (ℳ Intro to Proofs) course*

HW1A: Read sections 1 and 2 of the project.

Reading Questions:

1. What is logic?
2. What did Boole attempt to create?
3. What is an “implication”?
4. How are implications related to modern computers?
5. According to Aristotle, what is the difference between a sentence and a proposition?
6. What is a syllogism?

HW 10A: Read textbook Section 2.2.

Reading questions:

1. Make up two great examples of your own of multiply quantified statements, in which the meaning changes dramatically when the order of the quantifiers is changed as in Examples 2.2.1 and 2.2.2. Explain why this is the case for each.
2. Make a good example of your own of each of the two types (existential and universal) of multiply quantified statements discussed, and then write and explain their negations.

HW 10B: From the textbook, do §2.2, #6,8,14,17,19,32.

HW 10C: §2.2, #42,44 (careful, tricky!).

*From a first semester Calculus course several years ago, when Parts B and C were not separated*

HW 9A: Read §2.7. Reading questions:

1. Explain in your own words what your understanding is of the idea of the derivative of a function.
2. What are the different mathematical and physical interpretations we know of for the derivative of a function?

HW 9B/C: §2.7: # 2,4,6,8,12,22,26,28,32 (Parts B/C were combined then)