

# Homework 07, CPSC-4175

## Chapter 6, Object-Oriented and Classical Software Engineering

October 2, 2017

1. Where, in the software construction process, should testing occur? Explain your reasoning.
2. Explain the differences and similarities between *verification* and *validation*.
3. Explain the difference between *execution-based-testing* and *non-execution-based-testing*.
4. Discuss the concept of *quality* as that word is used in the phrase “software quality assurance.”
5. Why should software not be tested by the implementors, and not implemented by the testers? Think of an illustration from your life experience (not necessarily IT related).
6. Explain the difference between *correctness proofs* and *execution testing*? Which is “better?” Why?
7. Read the article *The Coming Software Apocalypse* in the PDF directory. Wrote a one paragraph appreciation of the article.
8. In regard to that article, how do you see your role in addressing the concerns raised in that article? Do you really think that there will be a “software apocalypse?”