

Exam #3 Study Guide

Ch. 10-13, 16 - 17
Exam: Tues 12/17/19

Review

All Class Notes: 11/5/19 to 12/12/19 (*All Exercises are fair-game for the exam!*)

Material from: Ch. 10-13, 16-17 & HW #11-16

Homework Problems

- Ch 10. 2, 5, 15-18, 21, 37, 46
- Ch 11. 4, 36, 57 (No Bernoulli's)
- Ch 12. 1, 12, 13
- Ch 13. only in-class exercises (No problems from Ch. 14 or Ch. 15)
- Ch 16. 3, 4, 6, 12, 16, 19 (a) & (b) only, 53, 56, 57, 64, 69
- Ch 17. 3, 19, 20, 21, 23

Remember: that a lot of the material that we are covering is cumulative and that it is important to know the concepts/physics behind the math.

- Averages can always be calculated, but aren't always useful or asked for.
- Conservation Laws can be used for any type of phenomena in practice,
- But applying conservation isn't always required and there are more conservation laws than just energy, e.g. continuity.
- Heat is always a transfer of thermal energy from temperature differences.
- We reuse math as much as possible, but physical interpretations have to be carefully considered as we do the math.