Topics of Midterm 1

- Modes of heat transfer
- 1D steady state heat conduction
- Thermal resistance models (series, parallel circuits)
- Fins

Problems to practice in the Lienhard textbook*:

1.1

1.19

1.22

1.23

2.9

2.17

2.18

2.27

2.29

2.30

2.35

2.40

2.41

2.42

4.19

4.26

Topics of Midterm 2

- Transient heat conduction (one-term solution, lumped capacitance method)
- Heat exchangers (basic calculations of parallel and counterflow heat exchangers, drawing T(x) functions for parallel and counterflow heat exchangers)

Problems to practice in the Lienhard textbook*:

1.8

1.42

5.24

5.27 only for copper!

5.33

5.46

Example 3.3 (page 113)

Example 3.5 (page 122)

Example 3.6 (page 125)

3.13 *a* and *b*