

Textbook: Yunus A. Çengel

Chapter: 1. Basic Concepts of Thermodynamics and Heat Transfer

Examples: 1, 2, 3, 5, 6, 8, 9, 10, and 11 (not to be handed in)

Problems: 20, 23, 35, 41, 68, 71, 76, 77, 80, 85, 90, 101, 104.

Remarks: For problem 1-35: the answer is 3.0 kW. Hint for problem 1-85: when using the one-dimensional heat conduction formula, you must assume that heat is unidirectional. For this reason, the edges of the box must be excluded. Answer for 1-104, $T_s = 285K$.