## ME 133, Winter 2023 University of California, Riverside Department of Mechanical Engineering

Textbook problems (5th edition): 2.2, 2.4, 2.7, 2.12, 2.22, 2.39

Special problems:

- 1. A resistive element is driven by a source that is modeled as a Thevenin equivalent. Show that the power dissipated in the resistive element is a maximum when its resistance R is equal to the source resistance  $R_s$ .
- 2. A resistive element is driven by a source that is modeled as a Norton equivalent. Show that the power dissipated in the resistive element is a maximum when its resistance R is equal to the source resistance  $R_s$ .