

# Presentations

- 1) Singer-Thorpe: Metric spaces, bottom of page 5 to bottom of page 6. Define metric space, prove that the real numbers are a metric space.
- 2) Singer-Thorpe: Topological spaces, top of page 7 to page 8, including Theorem 2.
- 3) Singer-Thorpe: Basis for a topological space, from the definition on page 8 to Corollary on page 9.
- 4) Singer-Thorpe: Equivalent bases, from the definition on page 9 to the end of the section on page 11.
- 5) Singer-Thorpe: Connectedness, from the definition on page 11 to the example  $(\mathbb{R}^n - \{0\})$  on page 12.
- 6) Singer-Thorpe: Compactness, from the definition of open covering on page 12 to the end of the section on page 13.
- 7) Singer-Thorpe: Continuous functions, from the definition on page 13 to the end of page 14.
- 8) Singer-Thorpe: Continuous functions, page 15 to the end of the section on page 16.
- 9) Singer-Thorpe: Weaker topology, page 16 up to Theorem 2 on page 17.
- 10) Singer-Thorpe: Product topology, from the definition on page 17 to the end of the section (include at least two examples).
- 11) Handout: Quotient topology.