1. Munkres 10.6

2. Munkres 10.7

3. Munkres 24.12 a-c.

4. Munkres p.146 Number 4. (i.e. Problem 4 in the Supplementary Exercises on Topological Groups).

5. Suppose a topological group G acts continuously on a topological space X. Show that the quotient map $\pi : X \to X/G$ is an open map.

6. Suppose G is a topological group and H is a closed subgroup of G. Show that if H is a normal subgroup of G, then G/H is a topological group.